FENNEMORE CRAIG, P.C.

3003 North Central Avenue, Suite 2600
Phoenix, Arizona 85012-2913
(602) 916-5000

Phillip F. Fargotstein
Direct Phone: (602) 916-5453
Direct Fax: (602) 916-5653
pfargots@fclaw.com

Law Offices
Phoenix (602) 916-5000
Tucson (520) 879-6800
Nogales (520) 281-3480
Las Vegas (702) 692-8000
Denver (303) 291-3200

March 24, 2011

HAND DELIVERED
Mr. John C. Patricki
Arizona Department of
Environmental Quality
Compliance Section
1110 W. Washington St.
Phoenix, AZ 85007

Re: Phoenix Goodyear Airport (South) Declaration of Environmental Use Restriction for Former Chromium Beds

Dear Mr. Patricki:

Enclosed is an Application for a Declaration of Environmental Use Restriction relating to the former chrome beds at the PGA (South) Superfund Site. The application has been signed by the current property owner. It is our understanding that there have been prior discussions between the Arizona Department of Environmental Quality and the Goodyear Tire & Rubber Company concerning filing a DEUR in connection with the former chromium beds. If you have any questions concerning the enclosed application, please contact us.

Please advise us concerning ADEQ's fee, and we will arrange for payment.

Yours very truly,

FENNEMORE CRAIG, P.C.

Phillip F. Fargotstein

PFF/elp
Enclosure

2406134/41166.004

When recorded, return to:

JRC Goodyear, LLC
[Name of Owner or person designated by Owner]

C/O TEG, LLC
Attn: Blake Dawson
Reliance Management
2122 E. Highland, Suite 400
Phoenix, AZ 85016
[Address]

DECLARATION OF ENVIRONMENTAL USE RESTRICTION FOR PROPERTY WITH ENGINEERING CONTROL

[ADEQ Program Name] Waste Programs Division
[Facility Name] Former Goodyear Aerospace Corporation Facility
[Facility Address] 1300 S. Litchfield Road, Goodyear, Arizona

This Declaration of Environmental Use Restriction ("Declaration"), when recorded, is a covenant that runs with and burdens the Property, binds all owners and owners' heirs, successors and assigns, and inures to the benefit of the Arizona Department of Environmental Quality ("Department") and the State of Arizona.

This Declaration is executed and recorded by JRC Goodyear, LLC, an Arizona Limited Liability Company *[state each person's full name and legal status, for example, unmarried man, husband and wife, an Arizona corporation, etc.]* ("Owner").

DECLARATION

Owner covenants and agrees as follows:

A. Presence of Contamination. Environmental contaminants are present on all / (a portion) *[circle one]* of real property located at Southwest Corner of West Yuma Road and South Litchfield Road *[street address or, if none, identify the nearest land references, for example, corner of Route 9 and the Arizona canal near Bisbee, Arizona]*,Goodyear, Maricopa County, *[state the name of the city, town or county]*, Arizona ("Property").

B. Warranty of Title. Owner is the only owner of, and holds equitable and legal title to, the Property and has authority to execute and record this Declaration.

C. Legal Description. Owner's deed setting forth the legal description of the Property at which the contamination is located is attached and marked "Exhibit 1." If the Declaration applies to only a portion of the Property identified in "Exhibit 1," a legal description of the portion of the Property subject to this Declaration is attached and marked as "Exhibit 2."
The Property tax parcel numbers are 500-07-003J and 500-07-003K.

D. Maps. The location of the Property identified in "Exhibit 1" is depicted on a map attached and marked as "Exhibit 3"; the portion of the Property subject to this Declaration is depicted on a map attached and marked as "Exhibit 4."

E. Completion of Remediation. The date that remediation, remedial action, corrective action or response action was completed: March 31, 1993 *[state the date]*.

F. Environmental Contaminant Information. Complete the attached form "Exhibit 5, Environmental Contaminant Information," by providing a description of each environmental contaminant subject to a remediation, remedial action, corrective action or response action, and the remaining contaminant concentrations. If this is being accomplished pursuant to Title 18, Chapter 7, Article 2, Arizona Administrative Code, Exhibit 5 need include only those concentrations that are above the predetermined residential soil remediation levels in Appendix A, referenced in R1 8-7-205. For risk assessments, provide the resulting site-specific cumulative excess lifetime cancer risk and hazard index. Indicate exposure pathways which have been eliminated or reduced.

G. Engineering Control Statements. Because Owner is using an engineering control to satisfy the requirements of A.R.S. §§ 49-152 or 49-158, Owner agrees to the following:

1. The engineering control consists of the following:
Solidification of the contents of the former Chrome Drying Beds in order to immobilize the contaminants with 6" of clean compacted soil on top, followed by 3" of gravel on top of compacted soils, surrounded by a barrier to limit vehicle access to stabilized area. *[describe the control]*

2. The engineering control was constructed on or before March 31, 1993.
[state the date the control was completed]

3. The maintenance requirements of the engineering control are: Inspections, annually, semiannual groundwater sampling of designated monitor wells, reports submitted to EPA and ADEQ including inspection reports and mitigation responses to correct erosion. (See Exhibit 7.)
[describe the maintenance requirements]

4. In order to protect the public health and the environment, the engineering control must remain in place because: The solidified material must be maintained in order to avoid leaching of chrome or other metals to the environment or exposure of contaminants to the environment or persons.
[state the reason(s)why the control is necessary]

If any person desires to cancel or modify the engineering control in the future, the person shall obtain the Department's prior written approval. Any modification of the engineering control without the Department's prior written approval is void and a violation of this Declaration.

5. Owner hereby grants to the Department and its representatives, authorized agents, attorneys, investigators, consultants, advisors, and contractors the right of access to the Property at all reasonable times to verify that the engineering control is being maintained. The Department's right of access is

continuing and runs with the land. If access to the Property is restricted, Owner shall have any barrier to entry opened or removed at the Department's request.

7. Owner shall incorporate the terms of this Declaration into any lease, license or other agreement that is signed by Owner and that grants a right with respect to the Property. The incorporation may be in full or by reference.

8. Owner agrees to provide a copy of the Engineering Control Plan document dated March 31, 1993 (Revised July 20, 1993) to the subsequent purchaser of the property. Additional copies can be obtained through the Water Quality Assurance Revolving Fund (WQARF) Program.

9. If the institutional or engineering control will affect a right-of-way that is owned, maintained or controlled by a public entity for public benefit, the owner shall obtain the public entity's written consent before implementing the institutional control or constructing the engineering control.

H. Engineering Control Plans/Financial Assurance. The engineering control plan and financial assurance mechanism prescribed by A.R.S. § 49-152.01 are as follows: The Engineering Control Plan is attached as Exhibit 6 and the Inspection and Maintenance Plan is attached as Exhibit 7. The Inspection and Maintenance Plan (Exhibit 7) is the one that has been utilized with the concurrence of EPA and ADEQ for several years and reflects adjustments to the 1993 Maintenance and Inspection Plan based on information and data gathered since 1993.

The financial assurance mechanism is as follows: The estimated cost of the Revised Inspection and Maintenance Plan for the next 13 years (to reflect inspections and maintenance of the engineering control for a total of 30 years since 1993) is attached as Exhibit 8. Also attached as Exhibit 8 is the proposed financial assurance mechanisms to ensure the anticipated future costs are covered. In accordance with A.R.S. § 49-152.01B(1)(i), Owner requests approval of the proposed financial assurance mechanism by The Goodyear Tire & Rubber Company.

Subsequent owner(s) or transferee(s) shall demonstrate financial assurance within thirty days of the sale or transfer of the property for which a financial assurance mechanism is required, if a government entity used a government financial test or a government guarantee test to meet financial assurance requirements.

I. Engineering Control Periodic Inspections and Reports. Because Owner has elected to use an engineering control to satisfy the requirements of A.R.S. §§ 49-152 or 49-158, Owner shall maintain the engineering control to ensure that it continues to protect public health and the environment and shall inspect the engineering control at least once each calendar year or more. In accordance with the Inspection and Maintenance Plan attached as Exhibit 7, the engineering control(s) shall be inspected every year. Within thirty days after each inspection, Owner shall submit to the Department a written report that:

1. Describes the condition of the engineering control;
2. States the nature and cost of all restoration made to the control during the calendar year;
3. Includes current photographs of the control; and
4. Describes the status of the financial assurance mechanism prescribed by A.R.S. § 49-152.01,

and a certification that the financial assurance mechanism is being maintained.

The inspection report shall be submitted to the Department's DEUR Program Coordinator at the following address: 1110 W. Washington Street, Phoenix Arizona 85007.

J. Additional Information. More detailed information on the remediation is maintained and available at the Department of Environmental Quality, located at 1110 W. Washington Street, Phoenix, Arizona 85007.

K. Release of this Declaration. Request for the release of this Declaration pursuant to A.R. S. § 49- 152(D) or 49-158(L) may be filed by owners holding all equitable and legal title to the Property or having legal authority to file the request. The release portion of the fee specified in R1 8-7-604 was / **(was not)** *[circle one]* paid for this Declaration. If Owner elected, pursuant to R1 8-7-605, not to pay the release portion with the original fee, a release will not be granted until the Department receives payment of the release portion of the fee specified in R1 8-7-604, which is in effect at the time of the release request.

L. Sale or Transfer of the Property. At least five working days before the sale or other transfer of title to or an interest in the property or any portion of the property, the Owner and buyer or transferee shall provide written notice and written commitment as required by A.R.S. § 49-152.01(C).

M. Failure to Comply. If Owner fails to comply with this declaration or to implement the Engineering Control Plan document dated March 31, 1993, the Department shall give Owner written notice by certified mail of the failure. If Owner fails to take the action specified in the Department's notice, the Department may issue an order pursuant to A.R.S. §§ 49-152.02 and 49-158(I) and take any other action allowed by law.

N. Related Rules. If this Declaration is being used to comply with R18-12-263.01(B)(4)(d), the remaining information required by that rule is attached as Exhibits: NA *[state exhibit numbers or "NA. "]*.

JRC Goodyear, LLC
Owner *[state full name]*

By: Presson Goodyear Airport, L.L.C.
Its: Sole Member

By: Presson PV Eighteen, L.L.C.
Its: Managing Member

By: Presson Corporation, an Arizona corporation
Its: Sole Member

By: _____
Its: PRESIDENT
[signature]

Attn: Blake Dawson
Reliance Management
2122 E. Highland, Suite 400
Phoenix, AZ 85016
[current address of Owner]

N/A
Owner *[if more than one; state full name]*

N/A
[signature]

N/A
[current address of Owner]

Owner *[if more than one, state full name]*

N/A

N/A
[signature]

N/A
[current address of Owner]

N/A
Owner *[if more than one, state full name]*

N/A
[signature]

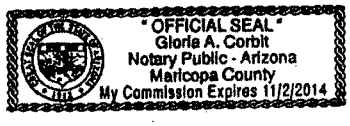
N/A
[current address of Owner]

This Declaration of Environmental Use Restriction was subscribed and sworn before me this 23rd day of February, 2011, by:

JRC Goodyear, LLC
[state full name and legal status of each Owner]

Gloria A. Corbit
Notary Public

My commission expires:



This Declaration of Environmental Use Restriction is approved this _____ day of _____, 20__, by the Arizona Department of Environmental Quality.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY, an agency of the State of Arizona,

by:

_____
[signature of the Department's authorized agent]

Name _____
[print name of the authorized agent]

Its _____
[state person's official title]

This Declaration of Environmental Use Restriction was subscribed and sworn to before me this day of _____, 20__, by:

_____
[state full name and title of Department's agent]

_____
Notary Public

My commission expires:

EXHIBIT 5

ENVIRONMENTAL CONTAMINANT INFORMATION

Contaminant Name	Chemical Abstract No.	Concentration(1)*	Exposure Pathway(s)(2)	Non-residential(3)		Residential(4)	
				Carc	Non-carc	Carc	Non-carc
Cadmium	7440-43-9	44	None	-	-	-	-
Chromium	7440-47-3	1,200	None	-	-	-	-
Chromium, Hexavalent	18540-29-9	15	None	-	-	-	-
			Total	-	-	-	-

*Source: Table 3, Chromium Sludge Drying Beds Sampling Report, Phoenix-Goodyear Airport South Site, Goodyear, Arizona, dated December 2008, prepared by Los Alamos Technical Associates, Inc. and previously produced to EPA and ADEQ.

(1) Units are mg/kg. The concentration is the maximum detected at the property, or the statistically determined value representative of the site-specific contaminant distribution in the area of concern. This value is not the exposure point determined by risk assessment methodology.

(2) Indicate all applicable complete exposure pathways as "O" for oral ingestion, "D" for dermal contact, and "I" for inhalation. One or more pathways may be eliminated by an institutional control, other than a restriction to non-residential uses. All three pathways are considered complete when the only restriction is limiting use of the Property to non-residential use.

(3) If a risk assessment has been conducted, list the calculated non-residential risk or hazard quotient for each contaminant. At the bottom of the carcinogen (carc) column, provide the cumulative excess lifetime cancer risk. At the bottom of the non-carcinogen (non-carc) column, provide the hazard index.

(4) Optional information, unless one of the following conditions occurs:

(a) A risk assessment evaluation for residential uses is required by the program;
(b) A risk assessment evaluation is conducted for residential use which requires implementation of any land use controls; or
(c) The Property use may change from non-residential to residential in the reasonably foreseeable future, and no risk assessment was conducted for residential use. Standard default residential exposure assumptions must be used to determine values for this column.

Exhibit 1	Deed for JRC Goodyear, LLC
Exhibit 2	Legal Description of the portion of the property subject to the DEUR
Exhibit 3	MAP reflecting general location of the Property (Attachments 1 and 2 from Consent Order, Docket No. 92-05, dated January 31, 1992 and maps from Google Maps)
Exhibit 4	Diagram of the portion of the property subject to the DEUR (based on Ex 2 – Survey)
Exhibit 5	Environmental Contamination Information
Exhibit 6	Final Report for Chrome Sludge Bed Remediation, March 31, 1993
Exhibit 7	Inspection/Maintenance Plan
Exhibit 8	Financial Assurance Mechanism

2324909/v2

EXHIBIT 1
TO DEUR APPLICATION FOR FORMER CHROME SLUDGE BEDS AT PHOENIX GOODYEAR AIRPORT

When recorded mail to:

Name: DEI Professional Ser LLC-
Address: 6224 NTH 24TH ST.
STE 200
City/State/Zip: Phoenix Az. 85016

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL
2010-0097882 02/05/10 09:42 AM
1 OF 4
FLORESC

this area reserved for county recorder

CAPTION HEADING:

Re-Recording due To Error in Legal Description.

DO NOT REMOVE

This is part of the official document.

EXHIBIT 1

OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL
20060437970 03/31/2006 03:35
ELECTRONIC RECORDING

1439768-7-10-1--
Knappenbergerc

LANDAMERICA COMMERCIAL SERVICES

When recorded, return to:

JRC Goodyear, LLC
c/oTEG, LLC
4425 North 24th Street, Suite 225
Phoenix, Arizona 85016
Attention: Carl Spiekerman

1/9 1439768

SPECIAL WARRANTY DEED

For consideration of Ten Dollars ($10.00), and other valuable consideration, DOS PALOS PARTNERS, LLC, (an Arizona limited liability limited partnership and TENBAR, INC, a Colorado corporation (collectively, "Grantor"), hereby convey to JRC GOODYEAR, LLC ("Grantee"), the following real property situated in Maricopa County, Arizona, together with all appurtenant benefits, rights, and privileges (collectively, the "Property"):

See Exhibit "A" attached hereto and incorporated herein by this reference.

Subject only to those matters described on Exhibit "B" attached hereto and incorporated herein by reference, Grantor binds itself and its successors to warrant and defend the title to the Property solely against all acts of Grantor and no other.

DATED this 28th day of MARCH, 2006.

DOS PALOS PARTNERS, LLC, an Arizona limited liability limited company

By: _____
Name: DON H. BENNETT
Title: MANAGER/MEMBER

TENBAR, INC., a Colorado corporation

By: _____
Name: WILLIAM C. BARBER
Title: PRESIDENT

625779

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

The foregoing instrument was acknowledged before me this 28th day of MARCH, 2006 by DON H. BENNETT, the MANAGER/MEMBER of DOS PALOS PARTNERS, LLC, an Arizona limited liability company, on behalf of the limited liability limited partnership.

Betsy Kitchens
Notary Public - Arizona
Maricopa County
My Commission Expires
June 24, 2007

Notary Public

My Commission Expires:
June 24, 2007

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

The foregoing instrument was acknowledged before me this 30th day of MARCH, 2006, by WILLIAM C. BARBER, the PRESIDENT of TENBAR, INC., a Colorado corporation, on behalf of the corporation.

Betsy Kitchens
Notary Public - Arizona
Maricopa County
My Commission Expires
June 24, 2007

Notary Public

My Commission Expires:
June 24, 2007

625779

EXHIBIT "A"

PARCEL NO. 1:

A parcel of land located in the East half of Section 16, Township 1 North, Range 1 West of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, more fully described as follows:

COMMENCING at the Northeast corner of said Section 16, being a brass cap in hand hole from which the East quarter corner of Section 16 being a brass cap in hand hole bears, South 02 degrees 10 minutes 46 seconds East, a distance of 2641.43 feet;

THENCE South 89 degrees 53 minutes 22 seconds West, along the North line of the Northeast quarter of said Section 16, a distance of 40.03 feet;

THENCE South 02 degrees 10 minutes 46 seconds East, departing said North line a distance of 33.02 feet to the Northerly right-of-way of Yuma Road and the Westerly right-of-way of Litchfield Road, said point also being the POINT OF BEGINNING of the parcel herein described;

THENCE South 02 degrees 10 minutes 46 seconds East, parallel to and 40 feet West of the East line of the Northeast quarter of Section 16 and along said Westerly right-of-way a distance of 1889.76 feet;

THENCE South 87 degrees 49 minutes 14 seconds West, continuing along said Westerly right-of-way of Litchfield Road, a distance of 15.00 feet;

THENCE South 02 degrees 10 minutes 46 seconds East, parallel to and 55 feet West of the East line of the Northeast quarter of Section 16 and along said Westerly right-of-way a distance of 720.22 feet;

THENCE South 02 degrees 12 minutes 40 seconds East, parallel to and 55 feet West of the East line of the Southeast quarter of Section 16 and along the Westerly right-of-way of Litchfield Road, a distance of 293.53 feet;

THENCE South 62 degrees 21 minutes 16 seconds West, departing said right-of-way a distance of 100.20 feet;

THENCE South 87 degrees 27 minutes 06 seconds West, a distance of 1070.11 feet to a point on the Easterly right-of-way of the Southern Pacific Railroad;

EXHIBIT "A" Continued

THENCE North 02 degrees 13 minutes 04 seconds West, along said right-of-way a distance of 2823.37 feet to a point of curvature of tangent curve, having a radius of 11,434.06 feet and a central angle of 00 degrees 51 minutes 52 seconds;

THENCE continuing along said right-of-way a distance of 172.49 feet along the arc of said curve to the right, to the Southerly right-of-way of Yuma Road;

THENCE North 89 degrees 53 minutes 30 seconds East, along said Southerly right-of-way a distance of 1176.85 feet to the POINT OF BEGINNING of the parcel herein described.

PARCEL NO. 2:

A parcel of land located in the West half of the Northwest quarter of Section 15, Township 1 North, Range 1 West of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, more fully described as follows:

COMMENCING at the Northwest corner of said Section 15, from which the West quarter corner of Section 15, bears South 02 degrees 10 minutes 46 seconds East, a distance of 2641.43 feet;

THENCE South 02 degrees 10 minutes 46 seconds East, along the West line of the Northwest quarter of said Section 15, a distance of 197.43 feet;

THENCE North 87 degrees 49 minutes 14 seconds East, departing said West line, a distance of 72.00 feet to the Easterly right of way of Litchfield Road and the POINT OF BEGINNING of the parcel herein described;

THENCE North 89 degrees 31 minutes 26 seconds East, departing said Easterly right of way of Litchfield Road a distance of 195.44 feet;

THENCE South 02 degrees 34 minutes 40 seconds east, a distance of 82.94 feet;

THENCE North 89 degrees 31 minutes 26 seconds East, a distance of 14.46 feet;

THENCE South 00 degrees 28 minutes 34 seconds East, a distance of 49.00 feet;

EXHIBIT B

PERMITTED EXCEPTIONS

1. RESERVATIONS contained in the Patent from the State of Arizona, reading as follows: This Patent is issued subject to any and all easements or rights of way heretofore legally obtained and now in full force and effect. (Parcel 1)

2. RESERVATIONS contained in the Patent from the United States of America, reading as follows: SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America. (Parcel 2)

3. RIGHT OF ENTRY to prospect for, mine and remove the minerals in said land as reserved in Patent to said land, as set forth in instrument recorded in Book 128 of Deeds, page 161. (Parcel 1)

4. WATER RIGHTS, claims or title to water, and agreements, covenants, conditions or rights incident thereto, whether or not shown by the public records.
This exception is not limited by reason of the disclosure of any matter relating to Water Rights as may be set forth elsewhere in Schedule B.

5. TAXES AND ASSESSMENTS collectible by the County Treasurer, a lien not yet due and payable for the following year:

   2006

6. EASEMENT and rights incident thereto, as set forth in instrument:

Recorded in Book.	66 of Miscellaneous records
Page	230
Purpose	electric down guys
Affects	Parcel No. 2

7. Intentionally omitted. (Easement)

8. Intentionally omitted. (Easement)

9. EASEMENT and rights incident thereto, as set forth in instrument:

Recorded in Docket	3084
Page	513
Purpose	electric lines
Affects	Parcel No. 2

10. Intentionally omitted. (Easement)

11. EASEMENT and rights incident thereto, as set forth in instrument:

Recorded in Docket	7081
Page	511
Purpose	electric lines
Affects	Parcel No. 1

EXHIBIT "A" Continued

THENCE South 89 degrees 31 minutes 26 seconds West, a distance of 12.66 feet;

THENCE South 02 degrees 34 minutes 40 seconds East, a distance of 18.01 feet;

THENCE North 88 degrees 53 minutes 16 seconds east, a distance of 1.08 feet;

THENCE South 02 degrees 23 minutes 44 seconds East, a distance of 92.08 feet;

THENCE North 87 degrees 33 minutes 43 seconds East, a distance of 332.18 feet;

THENCE South 02 degrees 10 minutes 46 seconds East, a distance of 894.90 feet;

THENCE South 89 degrees 31 minutes 59 seconds West, a distance of 530.24 feet to a point on the easterly right of way of Litchfield Road;

THENCE North 02 degrees 10 minutes 46 seconds West, along said right of way, a distance of 1125.44 feet to the POINT OF BEGINNING of the parcel herein described.

12. EASEMENT and rights incident thereto, as set forth in instrument:

Recorded in Docket	7453
Page	552
Purpose	electric lines
Affects	Parcel No. 1

13. Intentionally omitted. (Easement)

14. EASEMENT and rights incident thereto, as set forth in instrument:

Recorded in Docket	15434
Page	510
Purpose	water pipeline
Affects	Parcel No. 2

15. EASEMENT and rights incident thereto, as set forth in instrument:

Recorded in Document No.	85-204781
Purpose	overhead and underground electric lines
Affects	Parcel No. 1

16. TERMS AND PROVISIONS set forth in Document 87-210444, and re-recorded in Document No. 89-292977 and re-recorded in Document No. 89-310432 and re-recorded in Document No. 92-75465 and re-recorded in Document No. 92-78686.
(Affects Parcel No. 1)

17. EASEMENT and rights incident thereto, as set forth in instrument:

Recorded in Document No.	2002-83204
Purpose	sewer
Affects	Parcel No. 2

18. EASEMENT and rights incident thereto, as set forth in instrument:

Recorded in Document No.	2004-760470
Purpose	access
Affects	Parcel No. 1

19. AGREEMENT according to the terms and conditions contained therein:

Purpose	Easement
Recorded	September 23, 2004
Document No.	2004-1108510
Affects	Parcel No. 1

20. Intentionally omitted. (Access)

21. Intentionally omitted. (Survey)

22. Intentionally omitted. (Inspection)

23. RIGHTS OF PARTIES in possession.

20060437970
OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL

The foregoing instrument is an **electronically prepared** full, true and correct copy of the original record in this office.
Attest: 02/05/2010 09:36:29 AM

By _____ Recorder

EXHIBIT "A"

PARCEL NO. 1:

A PARCEL OF LAND LOCATED WITHIN THE EAST HALF OF SECTION 16, TOWNSHIP 1 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SECTION 16, TOWNSHIP 1 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA;

THENCE SOUTH 01 DEGREES 40 MINUTES 19 SECONDS EAST ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 16, A DISTANCE OF 40.58 FEET TO A POINT;

THENCE SOUTH 88 DEGREES 19 MINUTES 41 SECONDS WEST, DEPARTING SAID EAST LINE, A DISTANCE OF 40.00 FEET TO THE WESTERLY RIGHT OF WAY OF LITCHFIELD ROAD PER DOCKET 1803, PAGE 379, RECORDS OF MARICOPA COUNTY, ARIZONA, AND THE **POINT OF BEGINNING** OF THE PARCEL HEREIN DESCRIBED;

THENCE SOUTH 01 DEGREES 40 MINUTES 19 SECONDS EAST, ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 1,879.22 FEET TO THE SOUTH LINE OF THE NORTH 1920.00 FEET OF THE NORTHEAST QUARTER OF SECTION 16, TOWNSHIP 1 NORTH, RANGE 1 WEST;

THENCE NORTH 89 DEGREES 36 MINUTES 20 SECONDS WEST, ALONG SAID SOUTH LINE, A DISTANCE OF 15.01 FEET TO THE WESTERLY RIGHT OF WAY OF LITCHFIELD ROAD PER DOCKET 10334, PAGE 1305, RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE SOUTH 01 DEGREES 40 MINUTES 19 SECONDS EAST, ALONG SAID RIGHT OF WAY, A DISTANCE OF 721.42 FEET;

THENCE SOUTH 01 DEGREES 42 MINUTES 14 SECONDS EAST, CONTINUING ALONG THE WESTERLY RIGHT OF WAY OF LITCHFIELD ROAD PER DOCKET 10334, PAGE 1305, RECORDS OF MARICOPA COUNTY, ARIZONA, A DISTANCE OF 715.73 FEET TO A POINT, SAID POINT BEING 359.40 FEET NORTHWESTERLY AT RIGHT ANGLE FROM THE CENTER LINE OF THE SOUTHERN PACIFIC RAILROAD COMPANY'S CONSTRUCTED MAIN TRACK FROM PHOENIX TO WELLTON, AS DESCRIBED IN BOOK 95 OF DEEDS, PAGE 84, RECORDS OF MARICOPA COUNTY, ARIZONA, AND THE NORTH LINE OF THE PARCEL DESCRIBED IN DOCUMENT NUMBER 2007-0373285, RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE SOUTH 55 DEGREES 56 MINUTES 16 SECONDS WEST, ALONG SAID NORTH LINE, A DISTANCE OF 855.12 FEET TO THE NORTHEASTERLY RIGHT OF WAY OF THE EAST LEG OF THE SOUTHERN PACIFIC RAILROAD COMPANY'S WYE TRACK ON THE LITCHFIELD PARK BRANCH, AS DESCRIBED IN BOOK 149

OF DEEDS, PAGE 341, RECORDS OF MARICOPA COUNTY, ARIZONA, SAID POINT BEING 25.00 FEET NORTHEASTERLY MEASURED RADIALLY FROM THE CENTER LINE OF SAID TRACK NEAR THE CENTER OF A CURVE, HAVING A DEGREE OF CURVE OF 07 DEGREES 44 MINUTES 52 SECONDS, A RADIUS OF 739.50 FEET WHICH BEARS NORTH 22 DEGREES 32 MINUTES 52 SECONDS EAST, AND A TANGENT OF 421.20 FEET;

THENCE NORTHWESTERLY ALONG SAID RIGHT OF WAY AND THE ARC OF SAID CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 59 DEGREES 19 MINUTES 48 SECONDS, A DISTANCE OF 765.75 FEET TO THE END OF CURVE;

THENCE CONTINUING ALONG THE RIGHT OF WAY AS DESCRIBED IN BOOK 149 OF DEEDS, PAGE 341, RECORDS OF MARICOPA COUNTY, ARIZONA, NORTH 08 DEGREES 14 MINUTES 44 SECONDS WEST, A DISTANCE OF 59.20 FEET TO A POINT 25.00 FEET EAST AT RIGHT ANGLE FROM THE CENTER LINE OF THE MAIN TRACK BEING THE EASTERLY RIGHT OF WAY OF THE SOUTHERN PACIFIC RAILROAD COMPANY LITCHFIELD PARK BRANCH, AS DESCRIBED IN BOOK 149 OF DEEDS, PAGE 341, RECORDS OF MARICOPA COUNTY, ARIZONA, ALSO BEING ON THE NORTH END OF THE EAST LEG OF THE SOUTHERN PACIFIC RAILROAD COMPANY'S WYE TRACK ON THE LITCHFIELD PARK BRANCH AS DESCRIBED IN BOOK 149 OF DEEDS, PAGE 341, RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE NORTH 01 DEGREES 42 MINUTES 27 SECONDS WEST, CONTINUING ALONG SAID RIGHT OF WAY, A DISTANCE OF 3,001.99 FEET TO A POINT 25.00 FEET EAST AT RIGHT ANGLE FROM CENTER LINE OF THE MAIN TRACK AS DESCRIBED IN BOOK 149 OF DEEDS, PAGE 341, RECORDS OF MARICOPA COUNTY, ARIZONA, SAID POINT BEING THE BEGINNING OF A CURVE TO THE RIGHT, HAVING A DEGREE OF CURVE OF 00 DEGREES 30 MINUTES 04 SECONDS, A RADIUS OF 11434.15 FEET AND A TANGENT OF 75.59 FEET;

THENCE CONTINUING ALONG SAID RIGHT OF WAY AND THE ARC OF SAID CURVE TO THE RIGHT THROUGH A CENTRAL ANGLE OF 00 DEGREES 45 MINUTES 27 SECONDS, A DISTANCE OF 151.19 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF YUMA ROAD PER DOCKET 10334, PAGE 1305, RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE ALONG SAID SOUTHERLY RIGHT OF WAY LINE THE REMAINING 3 COURSES, SOUTH 89 DEGREES 36 MINUTES 20 SECONDS EAST, A DISTANCE OF 85.93 FEET;

THENCE NORTH 01 DEGREES 40 MINUTES 19 SECONDS WEST, A DISTANCE OF 13.00 FEET;

THENCE SOUTH 89 DEGREES 36 MINUTES 20 SECONDS EAST, A DISTANCE OF 1,090.71 FEET TO THE **POINT OF BEGINNING** OF THE PARCEL HEREIN DESCRIBED.

EXCEPT THAT PORTION LYING SOUTH OF THE FOLLOWING DESCRIBED LINE;

COMMENCING AT THE NORTHEAST CORNER OF SECTION 16, TOWNSHIP 1 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA;

THENCE SOUTH 01 DEGREES 40 MINUTES 19 SECONDS EAST ALONG THE EAST

LINE OF THE NORTHEAST QUARTER OF SAID SECTION 16, A DISTANCE OF 40.58 FEET TO A POINT;

THENCE SOUTH 88 DEGREES 19 MINUTES 41 SECONDS WEST, DEPARTING SAID EAST LINE, A DISTANCE OF 40.00 FEET TO THE WESTERLY RIGHT OF WAY OF LITCHFIELD ROAD PER DOCKET 1803, PAGE 379, RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE SOUTH 01 DEGREES 40 MINUTES 19 SECONDS EAST, ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 1,879.22 FEET TO THE SOUTH LINE OF THE NORTH 1920.00 FEET OF THE NORTHEAST QUARTER OF SECTION 16, TOWNSHIP 1 NORTH, RANGE 1 WEST;

THENCE NORTH 89 DEGREES 36 MINUTES 20 SECONDS WEST, ALONG SAID SOUTH LINE, A DISTANCE OF 15.01 FEET TO THE WESTERLY RIGHT OF WAY OF LITCHFIELD ROAD PER DOCKET 10334, PAGE 1305, RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE SOUTH 01 DEGREES 40 MINUTES 19 SECONDS EAST, ALONG SAID RIGHT OF WAY, A DISTANCE OF 721.42 FEET;

THENCE SOUTH 01 DEGREES 42 MINUTES 14 SECONDS EAST, A DISTANCE OF 294.30 FEET TO THE **POINT OF BEGINNING** OF THE LINE HEREIN DESCRIBED;

THENCE SOUTH 62 DEGREES 51 MINUTES 43 SECONDS WEST, A DISTANCE OF 100.20 FEET;

THENCE SOUTH 87 DEGREES 57 MINUTES 33 SECONDS WEST, A DISTANCE OF 1069.75 FEET, TO THE EASTERLY RIGHT OF WAY OF THE SOUTHERN PACIFIC RAILROAD COMPANY'S WYE TRACK ON THE LITCHFIELD PARK BRANCH, AS DESCRIBED IN BOOK 149 OF DEEDS, PAGE 341, RECORDS OF MARICOPA COUNTY, ARIZONA, AND THE **POINT OF TERMINUS** OF THE LINE HEREIN DESCRIBED."

PARCEL NO. 2:

A PARCEL OF LAND LOCATED IN THE WEST HALF OF THE NORTHWEST QUARTER OF SECTION 15, TOWNSHIP 1 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE FULLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 15, BEING A BRASS CAP IN HANDHOLE, FROM WHICH THE WEST QUARTER CORNER OF SECTION 15, BEING A BRASS CAP IN HANDHOLE, BEARS SOUTH 01 DEGREES 40 MINUTES 19 SECONDS EAST, A DISTANCE OF 2640.66 FEET;

THENCE SOUTH 01 DEGREES 40 MINUTES 19 SECONDS EAST, ALONG THE WEST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 15, A DISTANCE OF 197.43 FEET;

THENCE NORTH 88 DEGREES 19 MINUTES 41 SECONDS EAST, LEAVING SAID WEST LINE OF THE NORTHWEST QUARTER OF SECTION 15, A DISTANCE OF 72.00 FEET TO A POINT ON THE EASTERLY RIGHT OF WAY LINE OF LITCHFIELD ROAD AS DESCRIBED IN DOCKET NUMBER 10334, PAGE 1302, RECORDS OF

MARICOPA COUNTY, ARIZONA, SAID POINT ALSO BEING THE SOUTHWEST CORNER OF THE PARCEL AS DESCRIBED IN DOCUMENT NUMBER 1987-0532716, RECORDS OF MARICOPA COUNTY, ARIZONA, AND THE **POINT OF BEGINNING** OF THE PARCEL HEREIN DESCRIBED;

THENCE SOUTH 89 DEGREES 57 MINUTES 59 SECONDS EAST, LEAVING SAID EASTERLY RIGHT OF WAY OF LITCHFIELD ROAD AND ALONG THE SOUTH LINE OF THE PARCEL AS DESCRIBED IN DOCUMENT NUMBER 1987-0532716, RECORDS OF MARICOPA COUNTY, ARIZONA, A DISTANCE OF 195.43 FEET TO THE WEST LINE OF THE PARCEL AS DESCRIBED IN DOCUMENT NUMBER 1989-0387496, RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE SOUTH 02 DEGREES 04 MINUTES 05 SECONDS EAST, ALONG SAID WEST LINE, A DISTANCE OF 82.94 FEET TO THE NORTHWEST CORNER OF THE PARCEL AS DESCRIBED IN DOCUMENT NUMBER 1999-0367098, RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE SOUTH 02 DEGREES 04 MINUTES 13 SECONDS EAST, ALONG THE WEST LINE OF SAID PARCEL, A DISTANCE OF 49.03 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL AND A POINT LYING ON THE WEST LINE OF THE PARCEL AS DESCRIBED IN DOCUMENT NUMBER 1989-0387496, RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE SOUTH 02 DEGREES 04 MINUTES 05 SECONDS EAST, ALONG SAID WEST LINE, A DISTANCE OF 18.01 FEET TO THE SOUTH LINE OF SAID PARCEL;

THENCE NORTH 89 DEGREES 23 MINUTES 51 SECONDS EAST, ALONG SAID SOUTH LINE, A DISTANCE OF 1.08 FEET TO THE WEST LINE OF A PARCEL AS DESCRIBED IN DOCUMENT NUMBER 2005-0259144, RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE SOUTH 01 DEGREES 53 MINUTES 09 SECONDS EAST, ALONG SAID WEST LINE, A DISTANCE OF 92.08 FEET;

THENCE NORTH 88 DEGREES 04 MINUTES 18 SECONDS EAST, DEPARTING SAID WEST LINE AND ALONG THE SOUTH LINE OF SAID PARCEL, A DISTANCE OF 332.20 FEET TO THE EAST LINE OF THE WEST 602.00 FEET OF THE NORTHWEST QUARTER OF SECTION 15, TOWNSHIP 1 NORTH, RANGE 1 WEST, AND THE WEST LINE OF THE PARCEL DESCRIBED IN DOCUMENT NUMBER 2006-0905275, RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE SOUTH 01 DEGREES 40 MINUTES 19 SECONDS EAST, ALONG SAID EAST AND WEST LINE, A DISTANCE OF 894.51 FEET TO THE SOUTH LINE OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 15;

THENCE NORTH 89 DEGREES 57 MINUTES 27 SECONDS WEST, ALONG SAID SOUTH LINE, A DISTANCE OF 530.24 FEET TO A POINT ON THE EASTERLY RIGHT OF WAY LINE OF LITCHFIELD ROAD AS DESCRIBED IN DOCKET NUMBER 10334, PAGE 1302, RECORDS OF MARICOPA COUNTY, ARIZONA;

THENCE NORTH 01 DEGREES 40 MINUTES 19 SECONDS WEST, PARALLEL WITH AND 72.00 FEET EAST OF THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 15 AND ALONG SAID RIGHT OF WAY LINE, A DISTANCE OF 1125.06 FEET TO THE **POINT OF BEGINNING** OF THE PARCEL HEREIN DESCRIBED.

EXHIBIT 2
TO DEUR APPLICATION FOR FORMER CHROME SLUDGE BEDS AT PHOENIX GOODYEAR AIRPORT

ANASAZI LAND SURVEYING, INC.
3219 West Fuller Drive, Anthem, Az. 85086
Ph. 623-780-8400 Fax 623-780-8401 anasazils@cox.net

#10991
8/11/10

Legal Description for Chromium Bed at PGA South Superfund Site

THAT PORTION OF THE NORTHEAST QUARTER OF SECTION 16, TOWNSHIP 1 NORTH, RANGE 1 WEST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE DESCRIBED AS FOLLOWS:
COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 16, SAID POINT BEING A BRASS CAP IN HANDHOLE;
THENCE NORTH 01°25'25" WEST, ALONG THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 16, A DISTANCE OF 329.50' TO A POINT;
THENCE SOUTH 88°34'17" WEST A DISTANCE OF 546.23' TO THE POINT OF BEGINNING;
THENCE NORTH 03°06'30" WEST A DISTANCE OF 212.13' TO A POINT;
THENCE SOUTH 89°02'03" WEST A DISTANCE OF 107.39' TO A POINT;
THENCE SOUTH 01°38'45" EAST A DISTANCE OF 7.86' TO A POINT;
THENCE SOUTH 88°32'16" WEST A DISTANCE OF 147.13' TO A POINT;
THENCE SOUTH 00°11'17" EAST A DISTANCE OF 43.53' TO A POINT;
THENCE SOUTH 32°26'34" EAST A DISTANCE OF 31.56' TO A POINT;
THENCE SOUTH 02°57'26" EAST A DISTANCE OF 15.51' TO A POINT;
THENCE NORTH 88°16'55" EAST A DISTANCE OF 13.08' TO A POINT;
THENCE SOUTH 85°04'01" EAST A DISTANCE OF 21.52' TO A POINT;
THENCE SOUTH 72°52'54" EAST A DISTANCE OF 16.06' TO A POINT;
THENCE SOUTH 57°22'36" EAST A DISTANCE OF 25.59' TO A POINT;
THENCE SOUTH 43°19'24" EAST A DISTANCE OF 19.50' TO A POINT;
THENCE SOUTH 21°51'31" EAST A DISTANCE OF 31.62' TO A POINT;
THENCE SOUTH 09°25'59" EAST A DISTANCE OF 24.81' TO A POINT;
THENCE SOUTH 01°25'41" EAST A DISTANCE OF 28.17' TO A POINT;
THENCE NORTH 88°40'04" EAST A DISTANCE OF 146.55' TO THE POINT OF BEGINNING.

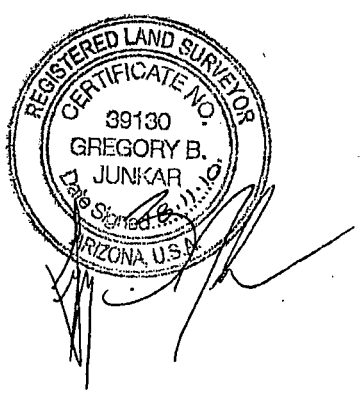


EXHIBIT 3
TO DEUR APPLICATION FOR FORMER CHROME SLUDGE BEDS AT PHOENIX GOODYEAR AIRPORT

Google maps **phoenix goodyear airport,** near **Arizona**

A. **Airport: Phoenix Goodyear**
Goodyear, Arizona - (602) 273-3302

B. **Phoenix Goodyear Airport-Gyr**
1658 South Litchfield Road, Goodyear, AZ -
(623) 932-1200

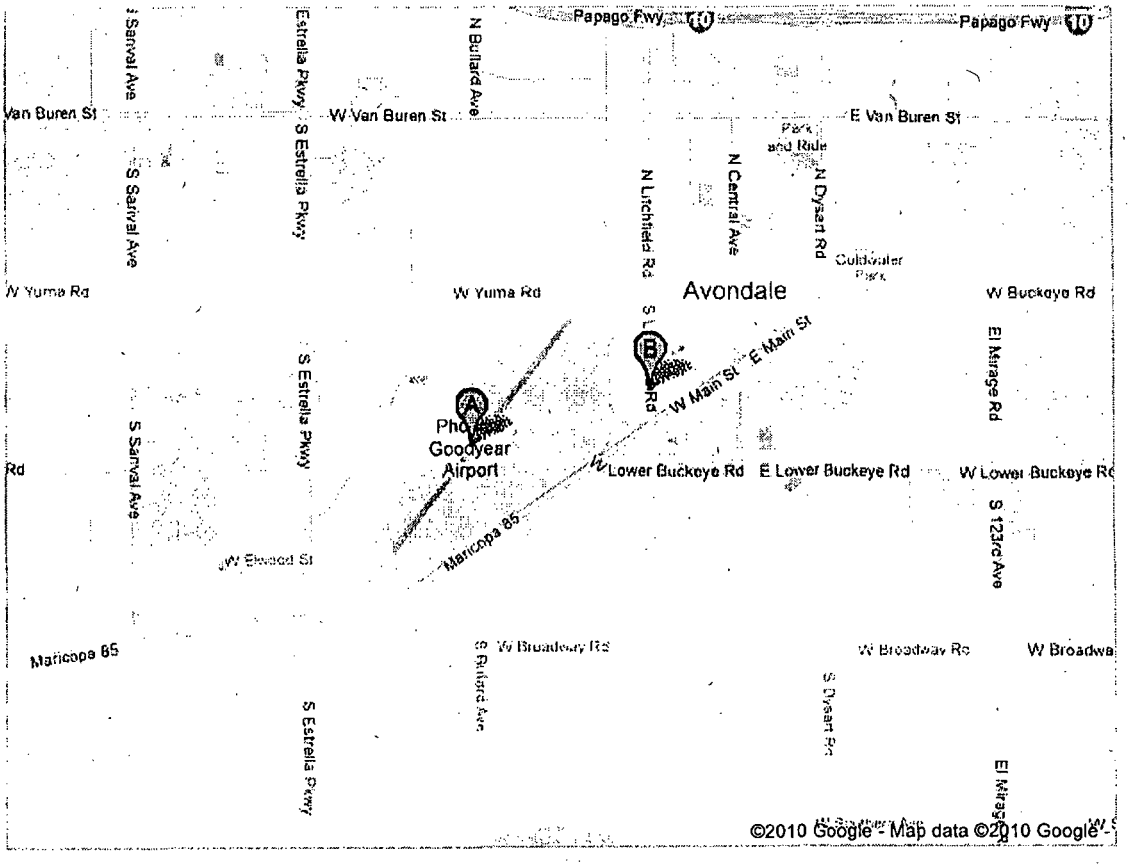


EXHIBIT 3

Google maps **phoenix goodyear airport,** near **Arizona**

A. **Airport: Phoenix Goodyear**
Goodyear, Arizona - (602) 273-3302

B. **Phoenix Goodyear Airport**-Gyr
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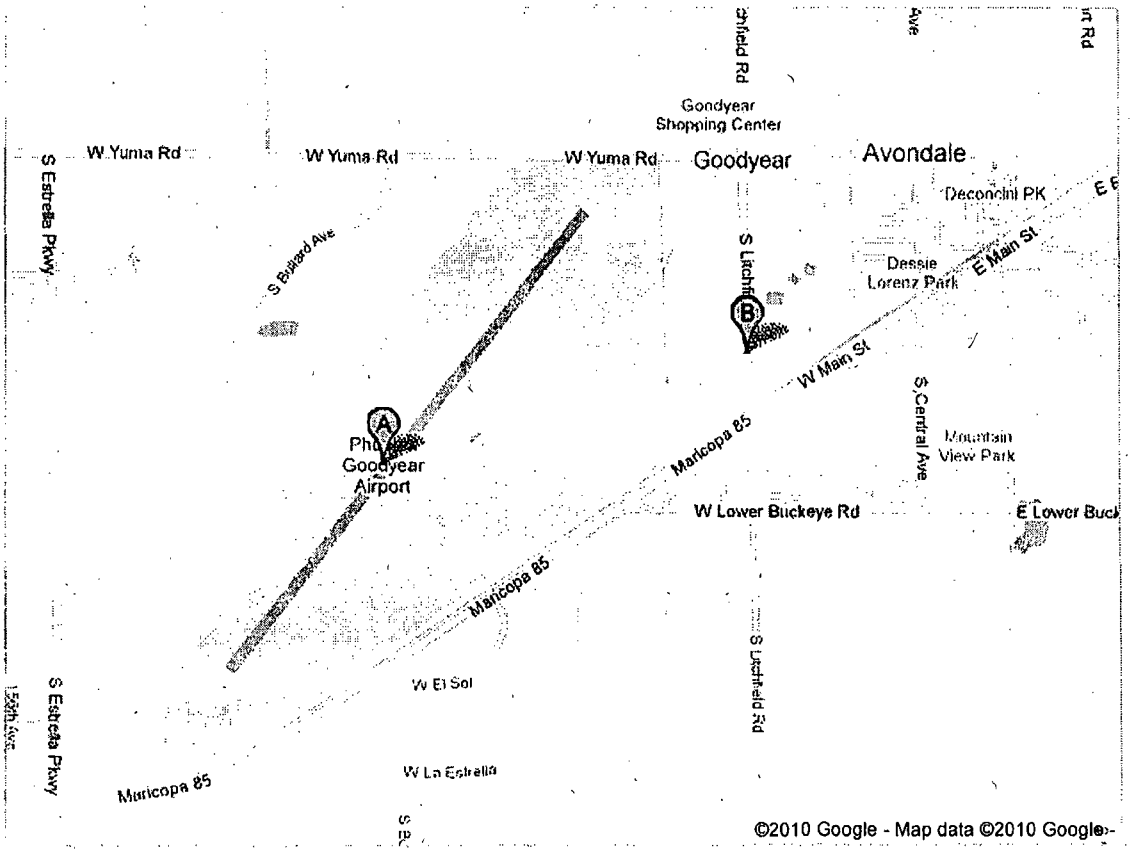


ATTACHMENT #1

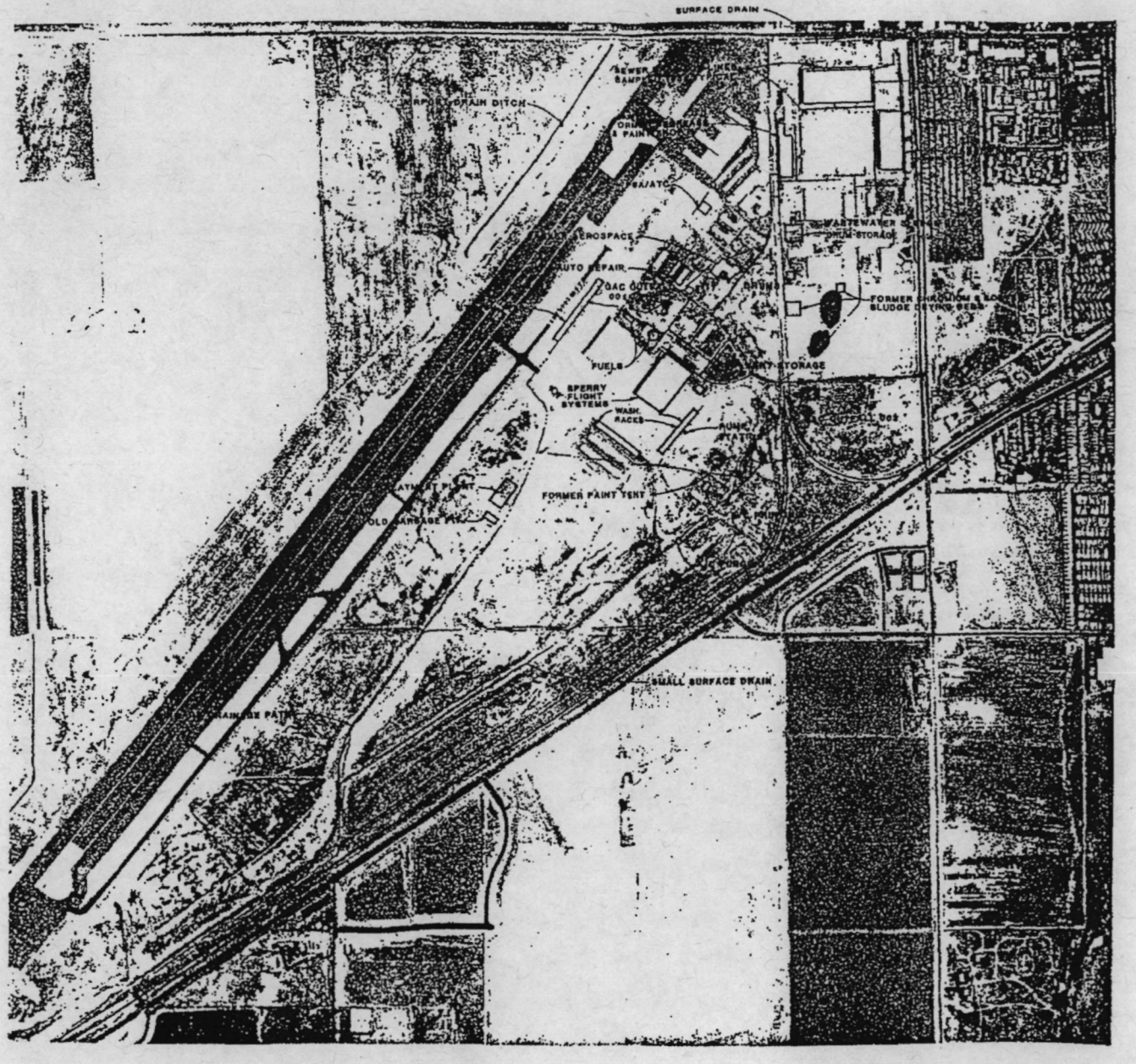


FIGURE 1.

THE PHOENIX-GOODYEAR AIRPORT SITE (SOUTH) AND LOCATION OF THE CHROME SLUDGE DRYING BEDS

ATTACHMENT #2

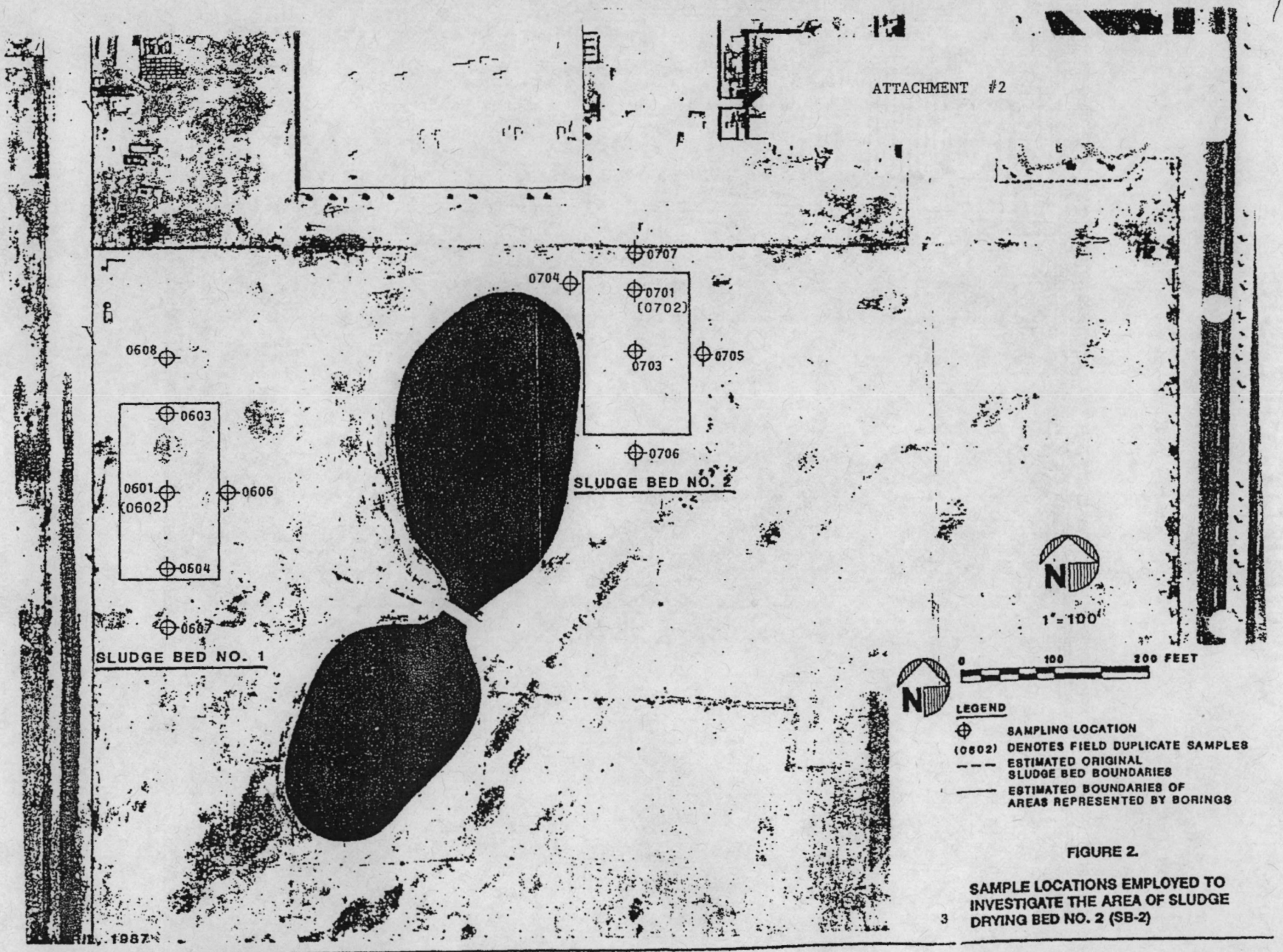


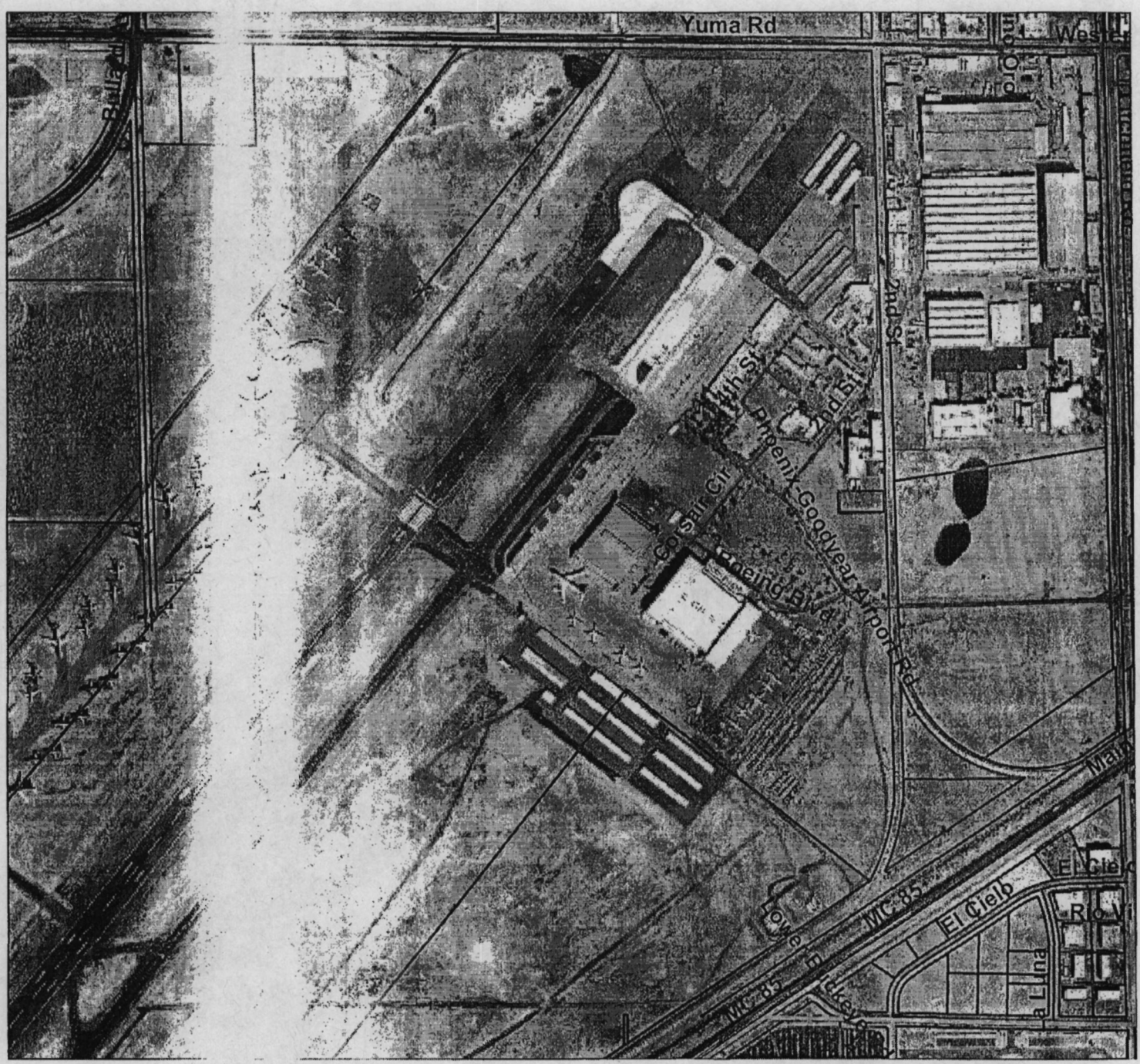
FIGURE 2.

SAMPLE LOCATIONS EMPLOYED TO INVESTIGATE THE AREA OF SLUDGE DRYING BED NO. 2 (SB-2)

RIL, 1987

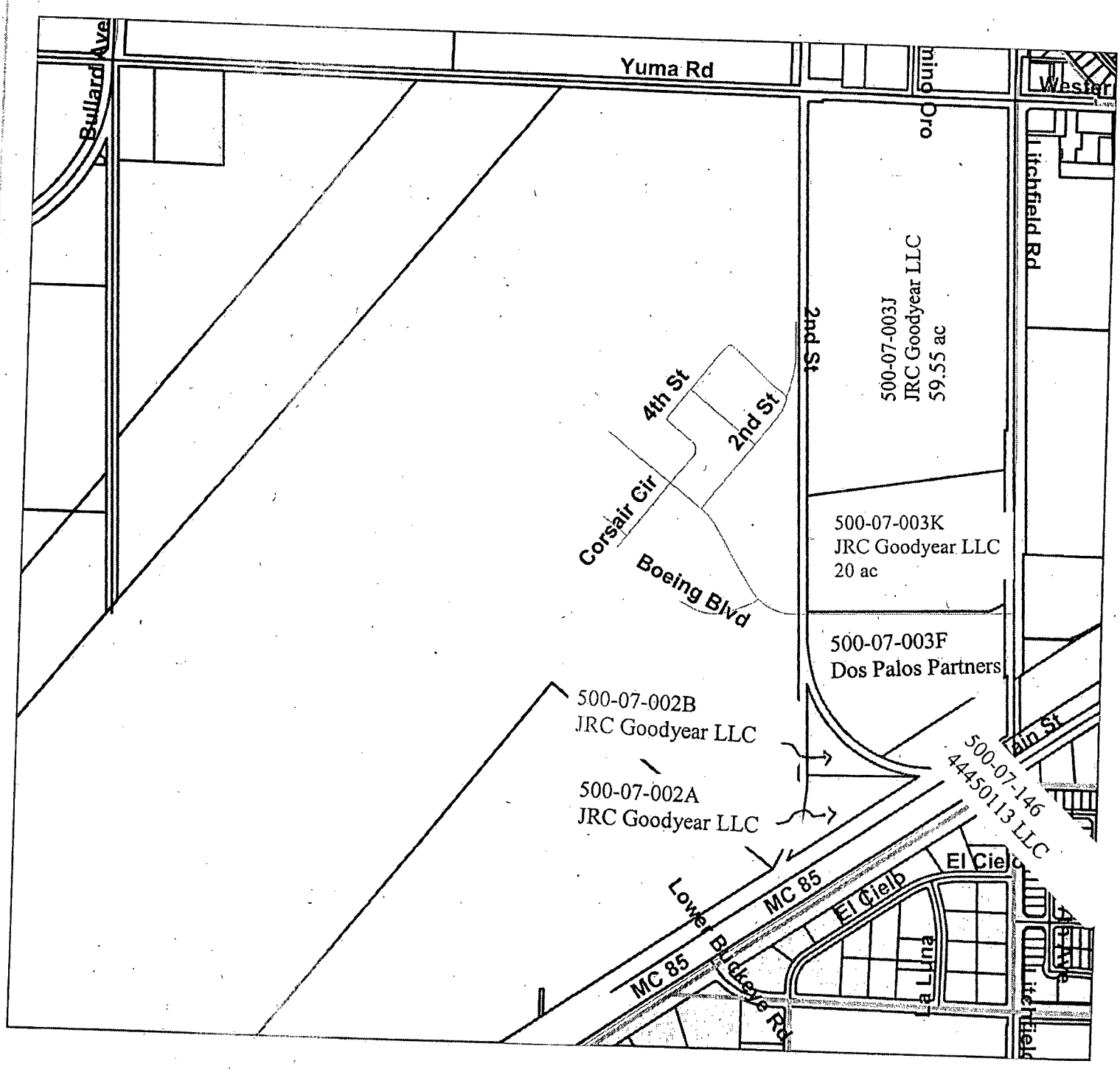
County Parcels

Sec 16 T1N R1W



County Parcels

Sec 16 T1N R1W

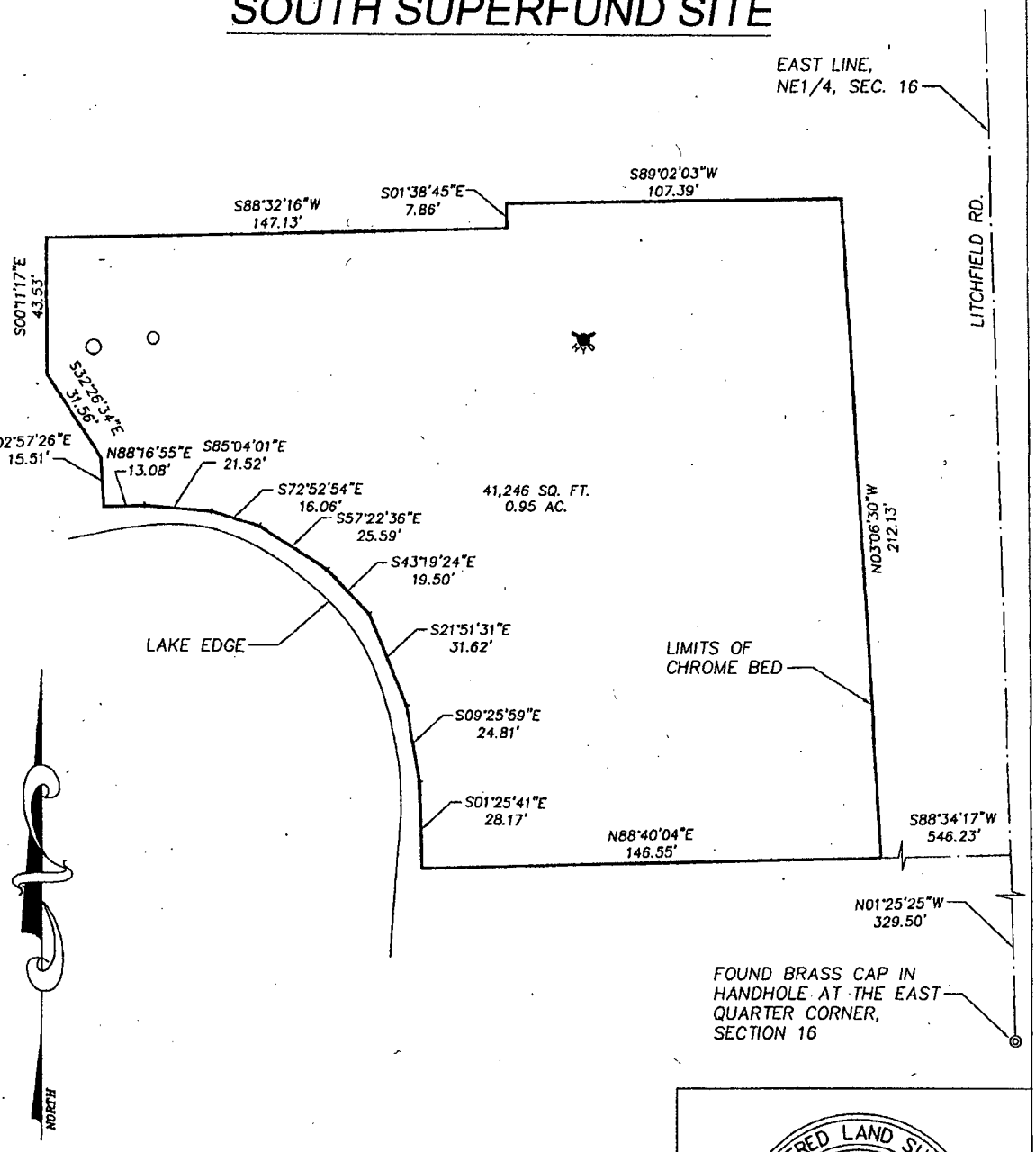


http://www.maricopa.gov/Assessor/GIS/Maps/assessor.mwf

Thursday, February 10, 2011 9:57 AM

EXHIBIT 4
TO DEUR APPLICATION FOR FORMER CHROME SLUDGE BEDS AT PHOENIX GOODYEAR AIRPORT

CHROMIUM BED AT PGA
SOUTH SUPERFUND SITE



REVISED AUGUST 11, 2010

ANASAZI LAND SURVEYING, INC.
3219 WEST FULLER DR.
PHOENIX, AZ. 85086
PH. 623-780-8400
FAX. 623-780-8401
ANASAZILS@COX.NET

PGA LEGAL #10991	
SCALE: 1"=50'	
JULY, 2010	
SHEET 1 OF 1	
CHROMIUM BED AT PGA SOUTH SUPERFUND SITE	NORTHEAST QUARTER, SECTION 16, T1N, R1W

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
39130
GREGORY B.
JUNKAR
Date Signed 7/11/10
ARIZONA U.S.A.

EXPIRES 6/30/2012

EXHIBIT 5
TO DEUR APPLICATION FOR FORMER CHROME SLUDGE BEDS AT PHOENIX GOODYEAR AIRPORT

EXHIBIT 5

ENVIRONMENTAL CONTAMINANT INFORMATION

Contaminant Name	Chemical Abstract No.	Concentration(1)*	Exposure Pathway(s)(2)	Non-residential(3)		Residential(4)	
				Carc	Non-carc	Carc	Non-carc
Cadmium	7440-43-9	44	None	-	-	-	-
Chromium	7440-47-3	1,200	None	-	-	-	-
Chromium, Hexavalent	18540-29-9	15	None	-	-	-	-
			Total	-	-	-	-

*Source: Table 3, Chromium Sludge Drying Beds Sampling Report, Phoenix-Goodyear Airport South Site, Goodyear, Arizona, dated December 2008, prepared by Los Alamos Technical Associates, Inc. and previously produced to EPA and ADEQ.

(1) Units are mg/kg. The concentration is the maximum detected at the property, or the statistically determined value representative of the site-specific contaminant distribution in the area of concern. This value is not the exposure point determined by risk assessment methodology.

(2) Indicate all applicable complete exposure pathways as "O" for oral ingestion, "D" for dermal contact, and "I" for inhalation. One or more pathways may be eliminated by an institutional control, other than a restriction to non-residential uses. All three pathways are considered complete when the only restriction is limiting use of the Property to non-residential use.

(3) If a risk assessment has been conducted, list the calculated non-residential risk or hazard quotient for each contaminant. At the bottom of the carcinogen (carc) column, provide the cumulative excess lifetime cancer risk. At the bottom of the non-carcinogen (non-carc) column, provide the hazard index.

(4) Optional information, unless one of the following conditions occurs:

(a) A risk assessment evaluation for residential uses is required by the program;
(b) A risk assessment evaluation is conducted for residential use which requires implementation of any land use controls; or
(c) The Property use may change from non-residential to residential in the reasonably foreseeable future, and no risk assessment was conducted for residential use. Standard default residential exposure assumptions must be used to determine values for this column.

EXHIBIT 6
TO DEUR APPLICATION FOR FORMER CHROME SLUDGE BEDS AT PHOENIX GOODYEAR AIRPORT

PHOENIX - GOODYEAR AIRPORT SUPERFUND SITE (SOUTH) CHROMIUM - CADMIUM RESPONSE ACTION

FINAL REPORT INSPECTION PLAN

MARCH 31, 1993

PREPARED FOR:

GOODYEAR TIRE & RUBBER COMPANY
1144 EAST MARKET STREET
AKRON, OHIO 44316

PREPARED BY:

BARTHOLOMEW ENGINEERING, INC.
4120 N. 20TH STREET, SUITE F
PHOENIX, ARIZONA 85016
(602) 957-0208

The Goodyear Tire & Rubber Company

Akron, Ohio 44316-0001

May 7, 1993

Mr. Craig Cooper
Remedial Project Manager
USEPA, Region IX
75 Hawthorne Street
San Francisco CA 94105

Dear Craig:

Subject: Phoenix-Goodyear Airport Superfund Site (South)
Chromium-Cadmium Response Action
Consent Order (Docket 92-05) Signed Jan. 31, 1992

This is to certify that the Goodyear Tire & Rubber Company has completed all the requirements of the subject consent order including subparagraphs 1, 2 and 3 of Section VII (Work to be Performed) in accordance and in full compliance with the consent order.

The Final Report and Inspection Plan was submitted March 31, 1993. Upon EPA approval of this document Goodyear will carry out the Inspection Plan.

I certify that the information contained in or accompanying this letter is true, accurate and complete.

Sincerely,

E P Waltz
Project Manager
Environmental Engineering

Bartholomew Engineering, Inc.

Environmental Civil Water/Wastewater Subdivisions Surveying

4120 North 20th Street Suite F
Phoenix, Arizona 85016
(602) 957-0208
(602) 956-3690 FAX

Richard F. Bartholomew, P.E., R.L.S.
President

July 20, 1993

Mr. Craig Cooper, Project Manager
U.S. EPA, Region IX
8th Floor
75 Hawthorne Street
San Francisco, CA 94105

RE: Phoenix-Goodyear-Airport Superfund Site (South)
Chromium Sludge Bed Action - EPA Consent Order No. 92-05
Final Report and Inspection Plan
B.E. Job #051290

Dear Mr. Cooper,

Transmitted herewith on behalf of our client Goodyear Tire and Rubber Company is the referenced Final Report and Inspection Plan, revised in compliance with your letter dated June 7, 1993 and Enclosures One and Two.

Enclosed is the revised text and Figure 5 and all tables which should replace the same pages in the original submittal. Also, added is Exhibit A showing the location of the site work area and new Tables 10 and Table 11. The remainder of the report remains the same as originally submitted.

We have prepared a listed revision response to each item as given in your letter and enclosures. A copy is enclosed for your review.

Please contact me or Mr. Edward P. Waltz, Goodyear Tire and Rubber Company if you have any questions or need more information.

Sincerely,

Richard F. Bartholomew

Richard F. Bartholomew, P.E.

RFB:ch

cc: Edward Waltz, Project Manager, GYTR&C, with response letter only.

RESPONSE TO ENCLOSURE ONE

General Comments

EPA

1. Tables.
Include a brief description of the tables when they are referenced in the text for the first time.

The entries in the tables such N/A (Table 3), WWB (Table 5), USC (Table 7), and Neg. (Table 9A) should be explained using foot notes in the tables.

Response

A brief description of the tables has been added to the text when they are referenced for the first time.

Footnotes have been added to the Tables to explain any abbreviations or acronyms used.

EPA
Specific Comments.

1. Page 4. Paragraph 3.
A few points have been used to plot the XRF accuracy curve in Figure 5, despite the fact that there are many points available in Table 2 for plotting.
It is stated that XRF always reads on the high side of the laboratory results. However, Figure 5 indicates the XRF readings fall below as well as above the laboratory results line; not only above the laboratory results as indicated in the text.

Response page 4, paragraph 2

The following paragraph was added to provide clarity for the calibration samples used for the XRF following the procedures given in the IWP.

"Calibration standards, using the on-site soils were taken at locations given on Table 2A. The samples were taken to specifically cover the expected ranges of Cr and Cd levels to be found on the site and are shown on Table 2A. The soil samples were homogenized and split. One portion was analyzed by the laboratory for Cr and Cd. The other portion was prepared as a calibration sample using special plastic cups provided by the XRF manufacturer and following the accepted procedure given in the IWP. The calibration samples having a known Cr and Cd level determined by the laboratory analysis results, were used for the XRF calibration each day during the

excavation work.

Page 4, paragraph 3.

This paragraph has been revised as follows:

During the progress of the work, samples were examined by the XRF and a split sample was sent to the laboratory for comparison analysis. The results of these samples analysis is shown on Table 2B. The results of the XRF analysis and the laboratory analysis show the XRF analysis was comparatively close enough to be used for the field determination of the high level Cr and Cd in the soil for excavation purposes. It proved to be a very valuable field instrument to determine whether soil had a high level of Cr and/or Cd without having to wait several days for a laboratory analysis to be completed.

The laboratory analysis and the XRF analysis for the sample, samples have been plotted on Figure 5. this figure shows the XRF versus laboratory examination for relative accuracy. The revised Figure 5 shows all points which were analyzed and summarized on Table 2B. Table 2B summarized the daily calibration samples showing both the XRF and the laboratory results for each sample. A review of the results of Table 2B and Figure 5 shows that the results of the XRF as fairly comparative with the laboratory analysis results and close enough to be used in the field to screen the soil as it was excavated to be either greater or less than 2000 mg/kg for Cr and 100 mg/kg for Cd.

EPA

2. Page 6, Paragraph 1.
The sentence "This separated the larger, cemented soils containing the higher levels of hexavalent Cr from the smaller sized soil mass having lesser Cr concentrations (see Table 3)". should read as "This separated the larger, cemented soils containing the lower levels of hexavalent Cr from the smaller sized soil mass having higher Cr concentrations see Table 4)."

Response

This sentence is correct as stated in the report. The larger sized, cemented lumps and soils, had the higher concentrations of hexavalent chromium levels. The screening process separated the larger sized soils having the higher hexavalent chromium levels from the smaller sized soils having lower hexavalent chromium levels. The remediation of the higher hexavalent chromium was completed by hauling off site. The remediation of the smaller sized particles with lower hexavalent chromium were

blended and stabilized on-site.

The laboratory analysis results by sieve size are given in Table 4 instead of Table 3 as noted in the original report.

EPA

3. Page 6, Paragraph 2.
It appears that the Table 3 should be referenced in Paragraph 2 of Page 6.

Response

Table 3 is a summary of the laboratory analysis of the hexavalent chromium stockpiles passing through the No. 8 sieve. Table 3 has been referenced in paragraph 2 of page 6.

EPA

4. Page 7, Paragraph 2.
About seven stockpiles are referenced in Table 5. Explain from where these stockpiles come. (Are the stockpiles listed in Table 5 different from the stockpiles listed in Table 3).

Response Page 7, Paragraph 2

The seven stockpiles shown on Table 5, were used as representative stockpiles of the 60 hexavalent chromium stockpiles for blending purposes with the intermediate soils. Once these stockpiles were blended and the laboratory tests were completed, the results were used as a guideline for the proper blending ratio for the remaining stockpiles.

EPA

5. Page 7, Paragraph 4.
Check the total volume of Cr^{+6}/Cd Stockpile soil used for blending. Table 6 shows that the total volume is 540 cy, but our calculation below shows the volume equals to 219.69 cy.

(From Page 5, total volume of hexavalent Cr soil (502.14 cy) and asbestos building trash soil (164.65 cy) is 666.79 cy. of this, (page 14) a total volume of (hexavalent Cr soil (387.1 cy), asbestos (40 cy), and plastic trash (20 cy) 447.1 cy is disposed of in the landfill. Thus the volume used for blending and stabilization in the field should be (666.79-447.1) (219.69 cy).

Response

The above calculations are correct for the soil as it was measured by surveying methods of the large on-site stock-piles. Table 6 states the estimated volumes in the smaller stock piles to be approximately 6 cy. each. No field measurements were made by ground survey of the screened hexavalent stockpile or the intermediate stockpiles amounts used for blending purposes. The blend ratios were made by a count of front-end loader buckets. The final verification of the proper ratio and stabilization was the resultant laboratory TCLP test of the stabilized soil. Table 6 has been noted to reflect the above calculations.

EPA

6. Page 8, Paragraph 4.
The Integrated Work Plan (IWP) indicates that the stabilized samples would be subjected to abrasion test. The results or the reason this test was not completed is not reported in this report.

Response

In a letter dated September 24, 1992, EPA approved the substitution of the Uniform Compression strength (UCS) of 100 pounds per square foot in lieu of the abrasion tests. The letter has been included in the report, see Appendix 18. The report has been revised on Page 8, paragraph 1.

EPA

7. Page 9, Paragraph 3.
Discuss how intermediate soil was placed in the excavation.

Response

The following paragraph has been added to Page 9, paragraph 3 "Excess intermediate soil, not used for blending, was stabilized and placed in the excavation areas along with the chromium and cadmium stabilized soil. It was also tested by the TCLP leachate test and analyzed for Cr and Cd. Compressive strength tests were also completed".

EPA

8. Page 9, Paragraph 4.
The report states that a 6 inch clean soil cover was placed on the stabilized soil. But,

according to the Integrated Work Plan (IWP), this thickness should be 7 inch.

Response

EPA, in their letter dated December 3, 1992, stated the cover material thickness could be 6 inch thickness. See letter in Appendix 18.

EPA

9. Table 7.
According to ACCESS #1718-Dal, the TCLP results for Sample No. SM 4-4 is: Cr = 0.81 ppm and Cd = 0.068 ppm, not Cr = 0.6 ppm and Cd = 0.2 ppm as reported here.
The results for a sample SM-21-3 reported on ACCESS # 1656-B-DAL, shows TCLP for Cd - 0.16 ppm (see Appendix 7). However, this sample result is not reported in Table 7.

Response

Table 7 has been revised to include these results. Two samples were taken at location SM-4-4 and both have been included in Table 7. Please note that the sample SM-21-3 was re-sampled after the site area at this location was re-stabilized. The first sample was taken on 10/26/92. The resample was taken on 11/2/92 after the area was restabilized.

EPA

10. General
Please provide a statement regarding whether Goodyear's performance of the response action complied with all the performance standards required under Section VII.2.f. of the Consent Order. Please recall that EPA replaced performance standard (c) (see page 16 of the Consent Order) with a compressive strength requirement of 100 pounds per square foot.

Response

A new section has been added in page 1, paragraph 2 which reads"

The completed performance on the part of Goodyear Tire and Rubber Company of the response action has complied with all performance standards required under Section VII.2.f of the Consent Order. EPA replaced the abrasion test as required on page 16 of the Consent Order with the Compressive strength requirement of 100 pounds per square foot.

RESPONSE TO ENCLOSURE TWO

EPA

General Comments

1. The report makes no reference to a "notice to the deed" that this response action took place on the property. Such a notice should not only be completed, but a reference to this notice should be included in the report.

Response

The "notice to the deed" has been added to the report at page 1 paragraph A-3. The notice will be conveyed to Loral Defense System, the property owner.

EPA

2. At the time of the report, how well has the site been maintained? Are there any signs of erosion? How well does surface runoff water drain from the site?

Response

Drainage of the site was severely tested by the record rainfalls of December, January, February, and March 1993. No erosion damage was noted on the site except a small area where two roof drains discharged onto the site area near the northwest corner in grid 1. A small area of gravel cover material was washed off-site.

There was no erosion noted in the cover material or the underlying stabilized material. The area has been restored to the original condition and wooden baffles have been installed to divert the roof drain water away from the site.

The gravel has been replaced and redwood baffles have been placed to divert the drainage water away from the site area.

EPA

3. The tables should indicate the units of the sampling data (i.e. mg/kg?)

Response

All tables have been revised to show the units of the laboratory analysis.

EPA

Specific Comments

1. Page 1, Section A: The document references "the Consent Decree". This should read "Consent Order" and the order should be properly referenced (i.e. number and date). In addition, this Section states that this report has been prepared in compliance with Section VII of the Consent Decree (Order). However, page 1 of the Bartholomew Engineering, Inc. cover letter states that the report was prepared "as required in the Consent Decree, Section III...". The proper section of the Consent Order should be referenced in both the report and the cover letter.

Response

Page 1, section A has been corrected to read "the Consent Order". The cover letter has been corrected to read, "as required in the Consent Order, Section VII, 2d and 2e,:.

EPA

2. Page 1, Section A: What is the date of the Integrated Work Plan?

Response Page 1, Section A

The date of the Integrated Work Plan is May 4, 1992 and this date has been added to this section.

EPA

3. Section B: A reference to the hexavalent chromium (hex chrome) and asbestos removal should be included under "Components of the Response Action".

Response Page 2, Section B, paragraph 4 (new)

An item was added to this sentence of the report that reads: "5. Off-site disposal of high level hexavalent chromium contaminated soil and asbestos trash".

EPA

4. Page 2, item 4: "TCLP" is an acronym for "toxicity characteristic leaching procedure".

Response Page 2, item 4, "TCLP" has been changed to read "toxicity characteristic leaching procedure".

EPA

5. Page 2, Section C: What is meant by ".. the surface area of the work site... was measured by the XRF..."

Response

To clarify the statement, it has been revised to read, "... the surface of the ground within the work site areas was analyzed for Cr and Cd levels using the XRF equipment...".

EPA

6. Page 2, section C: A map of the chromium (Cr) and cadmium (Cd) distributions, as determined by the x-ray fluorescence instrument (XRF), should be included in the report.

Responses

The XRF analysis procedures were used as a field tool to determine the approximate Cr and Cd levels in the in-situ soil to determine if excavation and stabilization was required. A map of the Cr and Cd distributions as determined by the XRF would be meaningless and was not required by the IWP as the soil which was analyzed was subsequently removed and stabilized. The soil left in the excavation and not removed was analyzed by discrete samples taken for verification and analyzed by the laboratory. These sample results are given in the report and complete the records for the levels of Cr and Cd in-situ as required by the Consent Order. For these reasons a map as requested has not been prepared.

EPA

7. Page 2, Section C: An explanation of the listed Cr and Cd cleanup levels should be included in the report.

Response Page 2, Section C.

The following sentence has been added. "The IWP required all soils, within the work area, containing over 2000 mg/kg of total chromium and over 100 mg/kg of cadmium to be stabilized sufficiently to pass the TCLP leachate analysis test for chromium of 5.2 mg/kg and for cadmium of 0.066 mg/kg.

EPA

8. Page 3, paragraph 1: Should read, ".. the residual soil contained less than 2000 mg/kg (Cr) and 100 mg/kg (Cd),..."

Response Page 3, Paragraph 1.

This change has been made.

EPA

9. Page 3, paragraph 2: The referenced table (Table 1) contains a column called "XRF Point No." Does this reflect Cr and Cd concentrations ad determined by the XRF? If so, why is there no apparent correlation with the lab results? Also, sample locations should be shown on the referenced figures (Figures 3 and 4).

Response Page 3, Paragraph 2

Figures 3-19 were prepared using the laboratory results data given on Table 1. The report has been revised accordingly. Also, Table 1 has been revised to state "XRF Results". The sample locations are given on Table 1 which was used to plot the isopleth maps (Figure 3-19). If the sample locations are shown the figures, they would be very difficult to read.

EPA

10. Page 4, Section D: this section attempts to describe the XRF's accuracy. Figure 5 ("accuracy curve") is extremely difficult to read. An explanation is needed. Also, this curve was constructed using only a small (most likely, selected) percentage of the hundreds of samples. Thus, the curve does not substantiate the claim of the XRF being "accurate within 10 percent of the laboratory analysis.." EPA, is unsure that the XRF was as accurate as claimed in this section. As a start, the curve should be redrawn with many more data points.

Response Page 4, Section D.

This section has been rewritten. The new section states the XRF analysis was used only as a field tool to assist in the excavation of the contaminated soils. Using the XRF analyzer, a quick approximation of the Cr and Cd levels of the soils could be made and the excavation activities could proceed without having to wait several days for the laboratory results. Figure 5 has been re-plotted showing all XRF versus laboratory results as shown on Table 2B (Table 2B shows the XRF versus laboratory results for the split samples analysis). All excavation areas (walls and floors) were discretely samples for laboratory analysis to verify that the remaining soils meet the

IWP requirements.

EPA

11. Page 5, Section E: The report should more completely describe how the hex chrome and asbestos soils were stockpiles. What safety precautions were taken? How were other piles maintained? How was dust suppressed during screening?

Response Page 5, Section E

The following sentences have been added. "All contaminated soil stockpiles, including the hexavalent chromium and asbestos were placed on plastic and covered with plastic sheeting to prevent any windborne contaminates from leaving the area. A perimeter network of continuously monitoring air sampling stations for asbestos and chromium were established around the work area. The monitors were checked three times daily during the working period when the asbestos and stabilization processes were operating. No high levels of asbestos or chromium were observed.".

EPA

12. Page 6, paragraph 1: Explain screen size numbers. Which numbers represent the larger sizes?

Response

The screen sizes are standard sieve sizes used for soil analysis. The sizes represent the number of openings in a square inch. A 3/4" screen means the screen openings are 3/4" x 3/4". A No. 8 sieve is a sieve with openings approximately 1/8" x 1/8". This is generally known and is not explained in the report.

EPA

13. Page 6, paragraph 1: The second sentence should be reworded. It is confusing. Also, it may not have been "necessary" to screen the soils. This sentence should indicate that "The soils were screened in attempt to assist with the separation of soils with high hex chrome content from soils with lower hex chrome content".

Response

This sentence as been reworded as suggested above.

EPA

14. Page 6, paragraph 1: Sentence #6, should also be reworded. A review of Table 4 does not show that, in every case, the larger soil fragments contained the higher concentrations of hex chrome, as is implied in this paragraph. Also, for assistance in reading Table 4, the reader should be aware that "Cr^{+6} is hex chrome.

Response Page 6, Paragraph 1

The paragraph has been revised to state ..it was generally noted that the higher concentrations were in the over no. 8 sized screens.

EPA

15. Page 7, paragraph 3: Why was the assumption made that the larger soils (greater than 3/4") should be separated into piles to be disposed of off-site? Where these piles sampled?

Response Page 7, Page 3

The larger sized soils were sampled separately and found to have higher levels of hexavalent chromium than could be reasonably stabilized.

The following sentence has been added. "These stockpiles were sampled and found to have Cr^{+6} levels higher than the stabilizing processes could feasibly treat. Table 10 has been added to present the Cr^{+6}, Cd and Asbestos levels in the soils disposed of off-site.

EPA

16. Page 7, paragraph 4: Table 6 does not contain any information on the volume of contaminated soil hauled off site.

Response

New Tables No. 10 and 11 have been added to present this information. Page 7, paragraph 4 has been revised to indicate the additional table.

EPA

17. Page 8, paragraph 3 and 4: An explanation as to what is meany by the references that all samples "successfully passed" is necessary, even though these criteria were mentioned in the beginning of the report.

Response

The sentence has been revised to state "successfully passed the Consent Order requirements..."

EPA

18. Section H: Describe the cover material. What was it? Where did it come from?

Response Page 9, Section H

The following sentence has been added. "Imported native soil was obtained from a local land owner having excess soil. The cover material was analyzed for heavy metals and VOC as required by EPA."

EPA

19. Page 12, line 3: The statement "None were found to be present" is incorrect. Cr, for example, was detected in the dry well in concentrations of up to 1,000 mg/kg.

Response Page 12, line 3

The sentence has been revised to read. "No levels were detected which required soil remediation."

EPA

20. Page 12, paragraph 1: How were the volatile organic compound samples taken from the base of the dry well? Also, a more complete description of VLEACH (i.e. What is it? Why was it used? What were the results of running VLEACH?) is necessary.

Response

Sampling was completed by Metcalf and Eddy personnel following approved EPA protocol for soil vapor samples approved by EPA, Region IX for the Superfund site.

The sample results were analyzed and are given in the report. EPA is utilizing the data from the sample in the overall soil vapor site assessments. VLEACH is a computer program approved by EPA, used for the determination if Volatile organic compounds (VOC) present an impact for contamination of groundwater over time. As such EPA determined that the low levels of VOC's found in the dry well present no

potential contamination to the groundwater and determined no further tests were necessary and approved the abandonment of the dry well. No change has been made in the report.

EPA

21. Page 3, Section E: This section contains an incomplete description of what happened to the asbestos trash that was discovered at the site. Information on associated chrome precipitates, the screening process and safety precautions taken should be included.

Response

1. The report states that the asbestos trash was hauled and disposed of at the Butterfield Stage landfill.

2. The report states that the stockpiles showing no asbestos fibers and had high chromium and cadmium were blended with intermediate soils and stabilized.

3. A sentence has been added to Section E as follows: "All work was completed in compliance with the EPA approved Health and Safety Plan given in the IWP.

EPA

22. Page I-1: Over how many years will the monthly site visits take place?

Response

The monthly site visits will continue as long as the Consent Order is in effect or until EPA notifies Goodyear Tire and Rubber Company that the site no longer needs such visits based upon the verification of the stabilization of the site, erosion and drainage conditions no longer warrant such activities. As of this report date no time limit has been given.

EPA

23. Page I-1, item #4: What constitutes "excessive erosion"?

Response

The following definition is added to Page I-1. Excessive erosion is defined as erosion to a degree that the cover material has been sufficiently removed by drainage waters to cause a potential erosion or displacement or leaching of the stabilized soil

containing the chromium and cadmium contamination to a degree that degradation of groundwater may be effected.

EPA

24. Page I-2, section B: Were alternatives other than elevation measurements evaluated, such as visual examination of the stakes? Why were elevation measurements chosen?

Response

As noted under Section A, page I-1-item 1.

1. A physical examination of the site will be conducted at least once per month... This is a visual examination of the site and the stakes. Elevation measurements were chosen to determine if any loss of cover material due to erosion has occurred. The loss of cover material is established by both visual and surveying methods. No change in the report wa made.

EPA

25. Page I-2, section B: Is a "grid point" the center of each grid?

Response

A grid point is defined as the intersection of grid lines. This is added to page I-2.

EPA

26. Page I-2, Section B, item #2: EPA suggests that, during the second year of site evaluation measurements, the elevation determination be conducted semiannually.

Response

This section has been revised to: "This procedure can be reduced to semi-annually for the second year of records without noticeable erosion and annually thereafter.

EPA

27. Page I-3: EPA asks that quarterly reports are also submitted to Byron James, ADEQ, Project Manger. (Instead of sending two copies to EPA).

Response

A second copy will be sent to ADEQ, Byron James, Project Manager.

EPA

28. Page I-3, item #3: This is unclear. Will EPA and ADEQ be notified only if erosion poses a threat to the aquifer? What if surface erosion occurs, yet does not imminently threaten the aquifer?

Response Page I-3, item No. 3

This item has been revised as follows: "Should the site be damaged by surface erosion or excavation to a degree that the integrity of the stabilized material is effected, EPA and ADEQ will be notified within 48 hours.

Bartholomew Engineering, Inc.

Environmental Civil Water/Wastewater Subdivisions Surveying

4120 North 20th Street Suite F
Phoenix, Arizona 85016
(602) 957-0208
(602) 956-3690 FAX

Richard F. Bartholomew, P.E., R.L.S.
President

March 31, 1993
Revised July 20, 1993

Mr. Craig Cooper,
U.S. E.P.A., Region IX
8th Floor
75 Hawthorne Street
San Francisco, CA 94105

RE: Phoenix-Goodyear-Airport Superfund Site (South)
Chromium - Cadmium Response Action
Final Report - Inspection Plan

Dear Craig.

On behalf of our client Goodyear Tire and Rubber Company, we have prepared the referenced final report and inspection plan as required in the Consent Order, Section VII, 2d and 2e respectively, and the EPA approved Integrated Work Plan (IWP).

The Site Remediation Contractor was:

VFL Technology
42 Lloyd Avenue
Malvern, PA 19355
(215) 296-2233
Joe Fabrizio - Project Manager

The Site Engineer was:

Bartholomew Engineering, Inc.
4120 N. 20th Street, Suite F
Phoenix, AZ 85016
(602) 957-0208
Richard F. Bartholomew, P.E. - Project Engineer

Transmitted herewith for your review and approval are the referenced items as follows in four binder notebooks.

1. Final Report and Inspection Plan
2. Appendix 1 - 7
3. Appendix 8 - 15
4. Appendix 16 - 18

This completes the required submittals for the Consent Decree. Please feel free to contact either Edward P. Waltz or Richard F. Bartholomew should you have any questions.

We appreciated your coordination and understanding of the project unexpected items and the responses which you provided. We will continue to provide reports and site monitoring as given in the Inspection Plan.

Sincerely,

Richard F. Bartholomew, P.E.

RFB:ch

cc: Edward P. Waltz, GYT&RC - (letter only)
Larry Smith, URS (entire submittal)
Joe Fabrizio, VFL (entire submittal)
Byron James, ADEQ (Final report & Inspection plan)
Tom Heim, LORAL (entire submittal)

Bartholomew Engineering, Inc.

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Richard F. Bartholomew, P.E., R.L.S.
President

March 31, 1993

Mr. Craig Cooper
U.S. E.P.A., Region IX
8th Floor
75 Hawthorne Street
San Francisco, CA 94105

RE: Phoenix-Goodyear Airport Superfund Site (South)
Chromium - Cadmium Response Action
Final Report - Inspection Plan

Dear Craig,

On behalf of our client Goodyear Tire and Rubber Company, we have prepared the referenced final report and inspection plan as required int he Consent Decree, Section III, 2 d and e, and the EPA approved Integrated Work Plan (IWP).

The Site Remediation Contractor was:

VFL Technology
42 Lloyd Avenue,
Malvern, PA 19355
(215) 296-2233
Joe Fabrizio - Project Manager

The Site Engineer was:

Bartholomew Engineering, Inc.
4120 N. 20th Street, Suite F
Phoenix, Arizona 85016
(602) 957-0208
Richard Bartholomew, P.E. - Project Engineer

Transmitted herewith for your review and approval are the referenced items as follows in four binder notebooks.

1. Final Report and Inspection Plan
2. Appendix 1 - 7
3. Appendix 8 - 15
4. Appendix 16 & 17

This completes the required submittals for the Consent Decree. Please feel free to contact either Edward P. Waltz or Richard F. Bartholomew should you have any questions.

We appreciated your coordination and understanding of the project unexpected items and the responses which you provided. We will continue to provide reports and site monitoring as given in the Inspection Plan.

Sincerely,

Richard F. Bartholomew, P.E.

RFB:ch

cc: Edward P. Waltz, GT&RC - (letter only)
Larry Smith, URS (entire submittal)
Joe Fabrizio, VFL (entire submittal)
Byron James, ADEQ (Final Report & Inspection Plan)
Tom Heim, LORAL (entire & submittal)

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FINAL REPORT

FIGURES

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FINAL REPORT

REVISED JULY 20, 1993

(REVISED WORDING IS IN BOLD PRINT)

I. SUMMARY OF WORK COMPLETED

A-1. Introduction

The final report has been prepared on behalf of Goodyear Tire and Rubber Company in compliance with the Consent Order, Section VII, 2d. The final report summarized the response action taken by Goodyear Tire and Rubber Company to complete the remediation of the chromium and cadmium contamination in accordance with the approved Integrated Work Plan (IWP) dated May 4, 1992 for the project. The remediation work began June 17, 1992 and was completed January 26, 1993.

A-2. Compliance with Consent Order

The completed performance on the part of Goodyear Tire and Rubber Company of the response action has complied with all performance standards required under Section VII.2.f of the Consent Order. EPA replaced the abrasion test as required on page 16 of

the Consent Order with the Compressive strength requirement of 100 pounds per square foot.

A-3. Notice to the Deed

A notice to the deed shall be completed stating the Chromium-Cadmium Response Action response has been completed in compliance with Environmental Protection Agency (EPA) Consent Order 92-05 on the site property as defined in the Integrated Work Plan. The location of the property is shown on Exhibit A.

B. Components of the Response Action

The completed components of the response action are:

1. Excavation of contaminated soil;
2. Field monitoring of contaminated material excavated by x-ray fluorescence (XRF) screening services monitoring equipment;
3. Stock-piling of Contaminated, Intermediate and Non-contaminated soils.
4. On-site stabilization of contaminated soil and placement into excavation in stabilized (cemented) form to provide toxicity concentration leachate Procedures (TCLP) levels of chromium of 5.2 mg/kg and cadmium of 0.66 mg/kg or less (limits given in

the Consent Decree).

5. **Off site disposal of high level hexavalent chromium contaminated soil and asbestos trash.**
6. Cover of clean soil was compacted in place over the stabilized material.
7. Gravel erosion cover was placed over the cover material.

C. Excavation Summary

In compliance with the IWP, prior to initial excavation, the surface of the ground within the area of the work site as delineated by Figure 12 of the IWP (see Figure 1) was analyzed for Cr and Cd levels using the XRF field equipment using a 25' x 25' grid see Figure 2. Map 1 shows the original ground contour levels and grid layout prior to excavation. The, IWP required all soils within the work area containing over 2000 mg/kg of total chromium and over 100 mg/kg of cadmium to be stabilized sufficiently to pass the TCLP leachate analysis for chromium of 5.2 mg/kg and for cadmium of 0.066 mg/kg. Areas showing levels of chromium over 2000 mg/kg or cadmium over 100 mg/kg were staked off for excavation. Soil from these excavations were stockpiled on-site for stabilization. Following Figure 1, similar excavations and measurements were

made at the 1-1.5 foot depth, 3-3.5' depth and 4-4.5 foot depths. Non-contaminated, overburden soils were stockpiled as intermediate soils and were later tested to ensure that the levels were not in excess of the Consent Decree limits. The perimeter of the excavated area was constantly checked with the on-site XRF equipment to assure that the contaminated soil was completely removed and stockpiled. Once the excavation perimeter XRF readings indicated that the residual soil contained less than 2000 mg/kg (Cr) and 100 mg/kg (Cd), verification samples were taken from the walls and bottom of the excavated area. This was to verify that the excavation process had removed the contaminated soil. No stabilized soil was placed in the excavation until the verification sample results were known and the excavation area was proven to be within the Consent Order limits.

A summary of the excavation verification samples is given in Table 1. Table 1 summarizes the results of the verification samples taken from the completed excavation floor and walls. Copies of the laboratory reports for the excavation samples analysis are given in Appendix 1. Figures 3 and 4 were prepared using the laboratory results given in Table 1, to show the Cr and Cd isopleth contours within the

excavation area.

Approximately 1894.68 cubic yards of intermediate soil and 1695.59 cubic yards of contaminated soil were excavated. Copies of the excavation calculations are given in the Appendix 2.

Map 2 shows the completed excavation area and relative contours. The original contours are also shown to provide excavation depth.

D. XRF Field Measurements

In compliance with the IWP, an x-ray refraction fluorescence (XRF) unit was used to measure the chromium (Cr) and cadmium (Cd) levels in the field during the excavation activities. Using the XRF for field measurements allowed the excavation to proceed rapidly without having to wait for laboratory testing results (14-30 days) to determine the Cr and Cd levels. The XRF unit was calibrated following the IWP procedures using Cr and Cd standards before, during and after each day's work.

Calibration standards, using the on-site soils were taken at locations given on Table 2A. The soil samples were homogenized and split. One portion was analyzed by the laboratory for Cr and Cd. The other portion was prepared as

a calibration sample using special plastic cups provided by the XRF manufacturer and following the accepted procedure given in the IWP. The calibration samples having a known Cr and Cd level by the laboratory analysis results were used for the XRF calibration each day and during the work.

The samples were taken to specifically cover the expected range of Cr and Cd levels to be found on the site and are shown on Table 2A.

During the progress of the work, samples were examined by the XRF and a split sample was sent to the laboratory for comparison analysis. The results of the sample analysis is shown on Table b. The results of the XRF analysis and the laboratory analysis show the XRF analysis was comparatively close enough to be used for the field determination of the high level Cr and Cd in the soil for excavation purposes. It proved to be a very valuable field instrument to determine whether soil had a high level of Cr and/or Cd without having to wait several days for a laboratory analysis to be completed.

The laboratory analysis and the XRF analysis for the sample samples have been plotted on Figure 5. This figure shows the XRF versus laboratory examination for relative

accuracy. The revised Figure 5 shows all points which were analysis and summarized on Table 2B. Table 2B summarized the daily calibration samples showing both the XRF and the laboratory results for each sample. A review of the results of Table 2B and Figure 5 shows that the results of the XRF as fairly comparative with the laboratory analysis results and close enough to be used in the field to screen the soil as it was excavated to be either greater or less than 2000 mg/kg for Cr and 100 mg/kg for Cd.

The laboratory analysis results for calibration are given in Appendix 3.

E. On-Site Stockpile and Screening of Material

The excavated material was divided into two separate stockpiles--contaminated soil and intermediate soil. Also, during the excavation an unknown area of hexavalent chromium and asbestos building trash was discovered, which was stockpiled separately. This is discussed later in this report. All contaminated soil stockpiles, including (hexavalent chromium and asbestos) were placed on plastic and covered with plastic sheeting to prevent any wind-borne contaminates from leaving the site. A perimeter network of continuously monitoring air sampling stations for asbestos and

chromium were stabilized around the work site. The monitors were checked three times per day throughout the working period, when the asbestos and stabilization activities were operating. No high levels of asbestos or chromium were observed. The laboratory results were given in Appendix 15 during the earthwork operation water was applied to the soil to maintain dust control.

The approximate stockpile volumes are as follows:

Contaminated (Cr) and (Cd) Soil =	1028.80 c.y.
Intermediate Soil =	1894.68 c.y.
Hexavalent Cr Soil =	502.14 c.y.
Asbestos Building Trash Soil =	164.65 c.y.
Cement & Line Additive Volume =	281.52 c.y.
TOTAL =	3871.79 c.y.

During the excavation operation, EPA approved amendments to the IWP, which allowed the proper treatment and disposal of the hexavalent Cr (Cr^{+6}) and contaminated soil and the asbestos building trash. In order to reduce the volume of hexavalent contaminated soil, to allow the stabilization process to adequately stabilize the Cr in the soil mass and to pass the TCLP tests, it was necessary to screen the hexavalent

chromium contaminated soil through 3/4" and No. 8 mesh screens. The soils were screened in attempt to assist with the separation of soils with high hexavalent chromium content in the larger sized particles from soils with lower hexavalent chromium content in the smaller sized particles. Table 4 show the results of the sieve analysis and relative Cr and Cd levels for different sized soils. Based upon a review of these results it was generally noted that the higher concentrations were in the over No. 8 sized screen. It was decided to separate the soil larger than a No. 8 sized screen from the lesser size. The laboratory analysis reports are given in Appendix 4.

The soil passing through the screening operation was blended with low-level intermediate soil as part of the required pre-treatment for the stabilization process. The soil passing through the No. 8 sieve (smaller sized particles) was placed into 60 small sized (less than 5 c.y.) stockpiles. Each stockpile was sampled and analyzed for total chromium, hexavalent chromium and total cadmium. The results of these laboratory analysis are summarized in Table 3.

The laboratory reports for the sieve analysis and the total chromium, hexavalent chromium and cadmium for the

stockpiles samples is given in Appendix 5.

Seven representative stockpiles were sampled and blended with intermediate soils. Laboratory tests were taken of the blended soils. Once these levels were determined a blending ratio was established. Trial blending samples were prepared for each stockpile and analyzed by the laboratory before the actual blending was accomplished in the field. Once the laboratory results showed the blending was adequate, the field blending was done following the acceptable blending ratio.

Blending ratio mix designs of hexavalent chromium and intermediate soils are given in Table 5 and Appendix 6.

The oversized soil not passing through the 3/4" screen was separated into stockpiles for off-site disposal. These stockpiles were sampled and found to have Cr^{+6} levels higher than the stabilizing process could feasibly treat. Table 10 shows the Cr^{+6}, Cd and Asbestos levels for the off site soil disposals.

Table 6 lists the stockpiled, screened materials which were blended with intermediate soils for final stabilization. Table 6 also gives stockpile volume for hexavalent chromium contaminated soil which was separated for off-site disposal.

F. Stabilization of Contaminated Soil

The on-site stabilization of the contaminated soil was achieved by using a large loader which would spread the contaminated soil in the on-site excavation area or mixing area. The soil was wetted to the proper moisture content determined by the on-site stabilizing contractor. Portland cement was then spread on top of the soil using the loader. A large soil mixer (BOMAG) unit was used to mix the cement and soil together by making numerous passes over the soil spread area. Once the mixing was completed and the soil had the proper consistency and water content, the soil was compacted into the excavation in lifts. The resulting stabilized soil had a compressive strength of over 100 pounds per square foot --the EPA-approved compressive strength requirement. **The uniform compression strength test was approved by EPA to replace the abrasion test specified in the IWP. See Appendix 18 for a copy of EPA's approval.**

During the stabilization process, samples were taken from the stabilized soil. One sample was taken for every 67 c.y. of stabilized soil and the location of the stabilized soil placement was recorded. The samples were prepared using the TCLP procedure and the leachate was analyzed for Cr and Cd levels.

The laboratory analysis results of the stabilized material samples are given in Table 7 the laboratory analysis results are given in Appendix 7. All areas successfully passed the TCLP tests **as given in the Consent Order.**

A second set of samples were also taken at the same time for compression tests. All samples successfully passed the compressive tests **as required by the Consent Order as revised by EPA.** The results of the compression tests are also given in Table 7. The laboratory analysis results of stabilized material samples are given in Appendix 7.

G. On-Site Stabilized Soil Placement

The stabilized material was placed into the excavated area. Map 3 shows the completed stabilized area contours at the top of the stabilized fill.

Figures 6-12 show the stabilized material locations and relative TCLP isopleth contours for Cr for depths 1′ to 7′ in 1′ levels. Figures 13-19 show the stabilized material locations and relative TCLP isopleth contours for Cd, for depths of 1′ to 7′ levels. **Excess intermediate soil not used for blending, was stabilized and placed in the excavated areas along with the chromium and cadmium stabilized soil. It was also tested by the TCLP leachate tests analyzed for Cr and Cd.**

Compression strength tests were also completed.

The top surface of the stabilized material was graded for drainage to flow off and away from the site at a grade of less than 3 percent to prevent erosion. The site elevations were approximately one to two feet higher at the center than the original ground elevations.

H. Cover Material

Imported native soil was obtained from a local land owner having excess soil. The cover material was analyzed for heavy metals and VOC as required by EPA. None were found above the normal background and acceptable levels.

Clean cover material was placed to a depth of 6 inches over the graded top of the stabilized soil. The cover material was compacted to a field density of 85 percent or better. The results are given in Appendix 8. The laboratory analysis results are given in Appendix 9.

I. Gravel Erosion Material

Clean gravel cover was placed over the entire work area to a minimum thickness of 3 inches. The edges of the gravel were tapered to meet the native ground. A berm was placed around the perimeter to prevent vehicular traffic from entering over the gravel area.

J. Off-Site Disposal

In accordance with Amendment No. 3 (see Appendix 10) of the IWP, approximately 387.10 c.y. of hexavalent chromium contaminated soil was hauled to the EnviroSave TSDF in Boise, Idaho where it was properly placed in the landfill. Copies of manifests for the hauling and disposal are given in Appendix 11.

In accordance with Amendment No. 4 of the IWP, approximately 60 c.y. of asbestos building trash and plastic liner were hauled to the Butterfield Stage landfill in Mobile, Arizona. Copies of manifests for the hauling and disposal are given in Appendix 12.

II. ISSUES, PROBLEMS OR DEFICIENCIES ENCOUNTERED

Unexpected issues and/or problems were discussed and approved by the EPA as soon as they were discovered. The IWP was amended with four amendments for these issues. Amendment copies are given in Appendix No. 10.

A. Hexavalent Chromium Deposit

During the excavation of the work area a deposit of non-reduced, hexavalent chromium was discovered. To remediate the contaminated soil, IWP Amendments No. 1 and 3 were prepared and approved by EPA. The highest chromium concentrations found in the hexavalent chromium samples were 78,000 mg/kg in the larger soil groups disposed of off-site into the approved landfill. The laboratory reports are given in Appendix 13. Approximately 387.10 c.y. of contaminated soil were remediated as given earlier in this report.

B. Dry Well

An abandoned dry well was discovered during the excavation work. It was an abandoned sewer disposal pit used between 1940-1945. It was 6 feet in diameter and 16' - 3" feet deep, and was constructed of brick and mortar. In accordance with Amendment No. 2 of the work plan, the bottom of the dry well and the perimeter outside the dry well were

tested for chromium, cadmium and volatile organic compounds. **No levels were detected which required soil remediation.** The summary of the laboratory analysis are given in Table 8 and copies of the laboratory analysis are given in Appendix 14. The dry well was backfilled with stabilized material with a 12" diameter steel casing installed in the center for access if more tests were needed. After a V-LEACH analysis was completed, EPA determined no further tests would be required, and the steel casing was cut off 1 foot below grade and backfilled with stabilized material. The abandoned dry well location is shown on Map 3.

C. Storm Drain Repairs

During the excavation work, the 48" corrugated metal pipe storm drain was discovered to have numerous leaks through damaged and deformed joints. A series of check dams and pumps had to be installed to de-water the leaking pipe before the concrete encasement could be placed. The concrete encasement was successfully installed and the entire storm drain system was repaired and tested for leakage. None were found.

D. Fire Protection Pipeline Encasements.

The concrete encasements were successfully installed around the fire protection water lines within the work area in

conformity with IWP.

E. Asbestos Building Trash

During the excavation work, a deposit of asbestos building trash was discovered buried within the site. The trash was tested and found to contain asbestos tile. See Table 9A and in Appendix 15. The trash and surrounding soil were segregated and covered within plastic sheeting. In accordance with Amendment No. 2 of the IWP, the asbestos trash was hauled and disposed of at the Butterfield Stage landfill discussed earlier herein. Results of the asbestos stockpile sampling and testing are given in Table 9B and in Appendix 15.

Stockpiles showing no asbestos fibers were blended according to the Cr and Cd levels with intermediate soils in preparation for stabilization. All such stockpiles were stabilized and placed into the excavation. **All work associated with this section was completed in compliance with the EPA approved Health and Safety Plan given in the IWP.**

F. Off-Site Disposals

In summary, the following wastes were hauled off-site for disposal:

Waste	Volume	Landfill
Hexavalent Chromium Soil	387.10 c.y.	EnviroSafe Boise, Idaho
Asbestos	40.00 c.y.	Butterfield Stage Mobile, Arizona
Plastic Trash	20.00 c.y.	Butterfield Stage Mobile, Arizona

Manifest copies are given in Appendixes 11 and 12. **The Envirosafe manifests are summarized in Table 11.**

G. Site Air Monitoring

During the entire screening operation, on-site air monitoring equipment was used as required by EPA. The air monitoring data indicated low levels of particulates and dusts. No asbestos or chromium compounds were detected at any of the air monitoring stations. The air monitoring was done by Envirogenics, 65 S. Main Street, Pennington, NJ 08534, under contract to the site contractor. Air monitoring data is given in Appendix 16.

H. Regulatory Personnel.

The site was visited periodically by representative from EPA and the Arizona Department of Environmental Quality (ADEQ). Split samples were taken by the agencies as needed for confirmation of the remedial action. Copies of the agency

laboratory analysis were not provided. However, the results were acceptable and given verbally to the site contractor.

I. Health and Safety Plan; Quality Assurance and Quality Control Plan

During the process of the site remediation work, all provisions of the approved Health and the Safety Plan and the QAQC Plan were followed. Copies of 40-hour trained personnel and medical examinations have been retained by each contracting company for future reference.

FIGURES

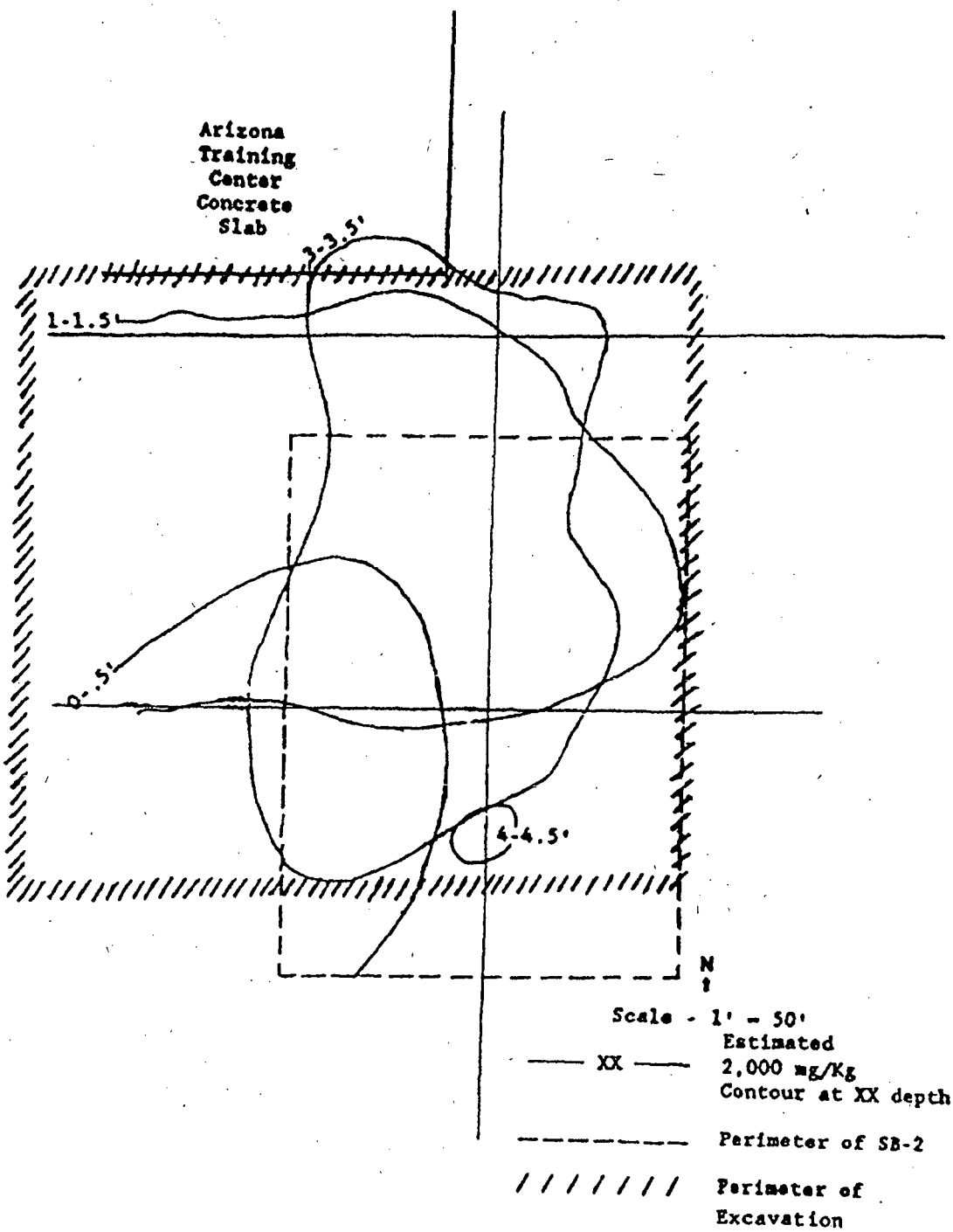
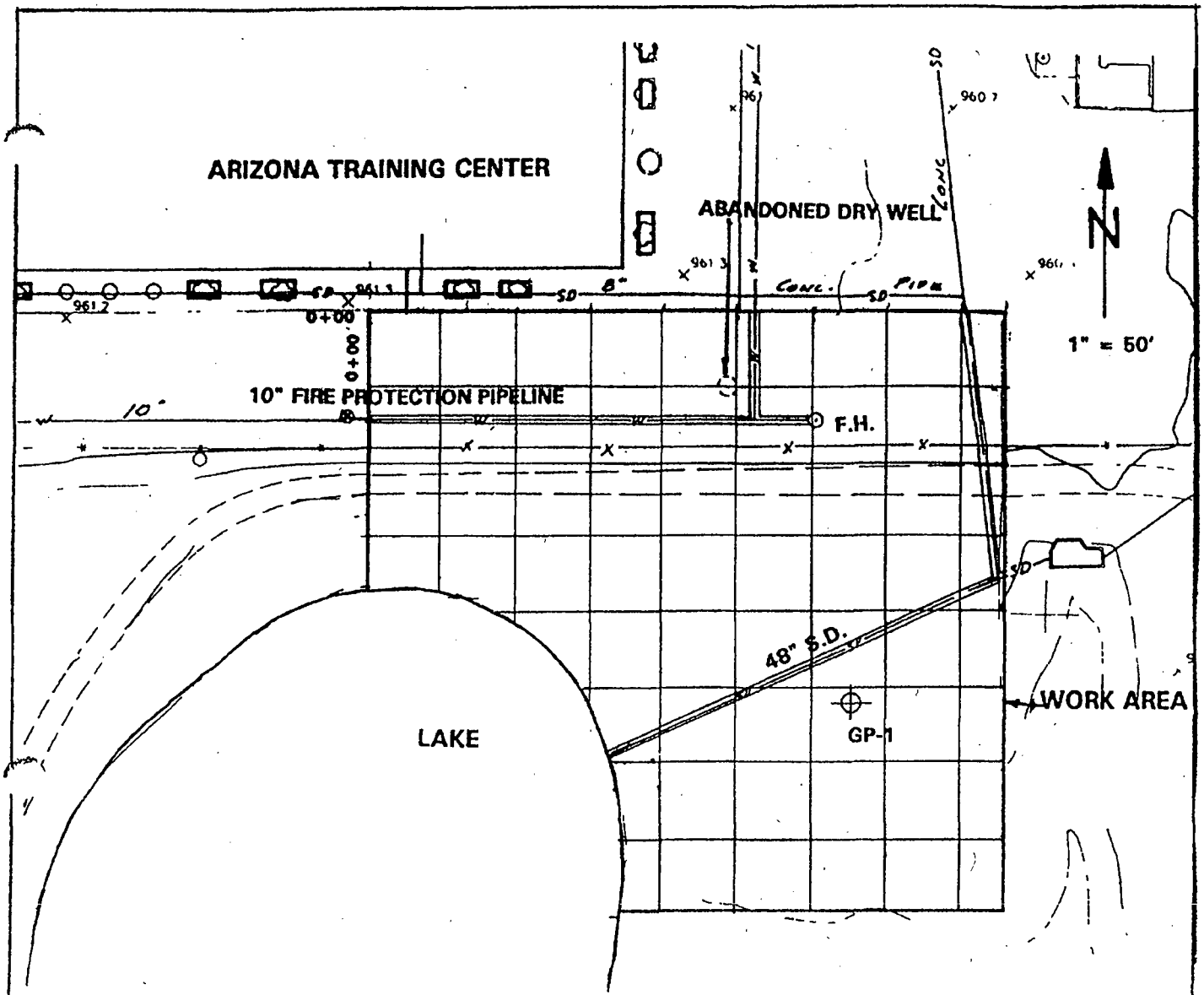


FIGURE 12. EXTENT OF EXCAVATION ACTIVITIES
INTEGRATED WORK PLAN

WORK AREA PLAN

F-1

FIGURE 1

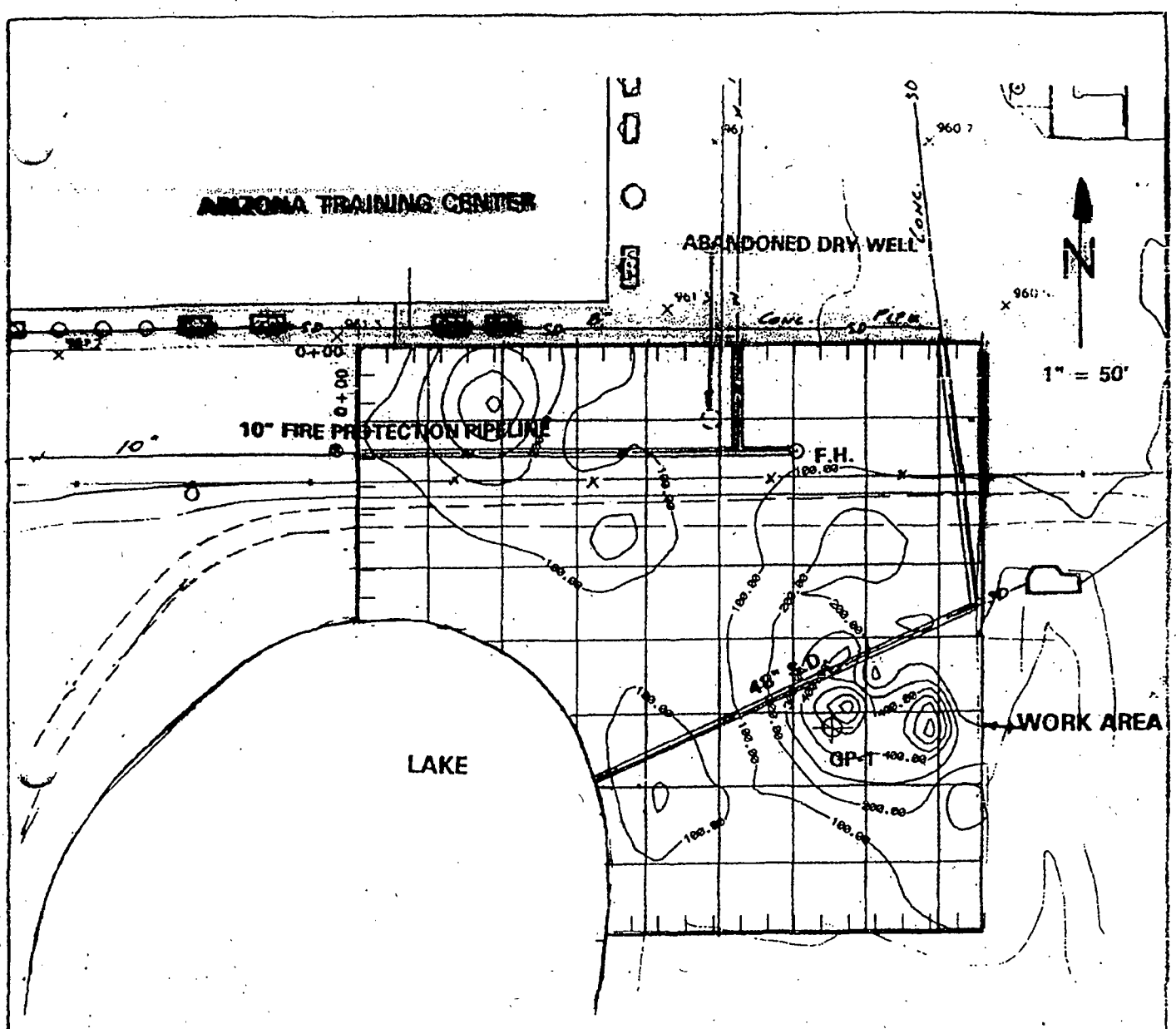


PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH 31, 1993

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

WORK AREA GRID (25'x25')

FIGURE 2



AS BUILT

ISOPLETH MAP

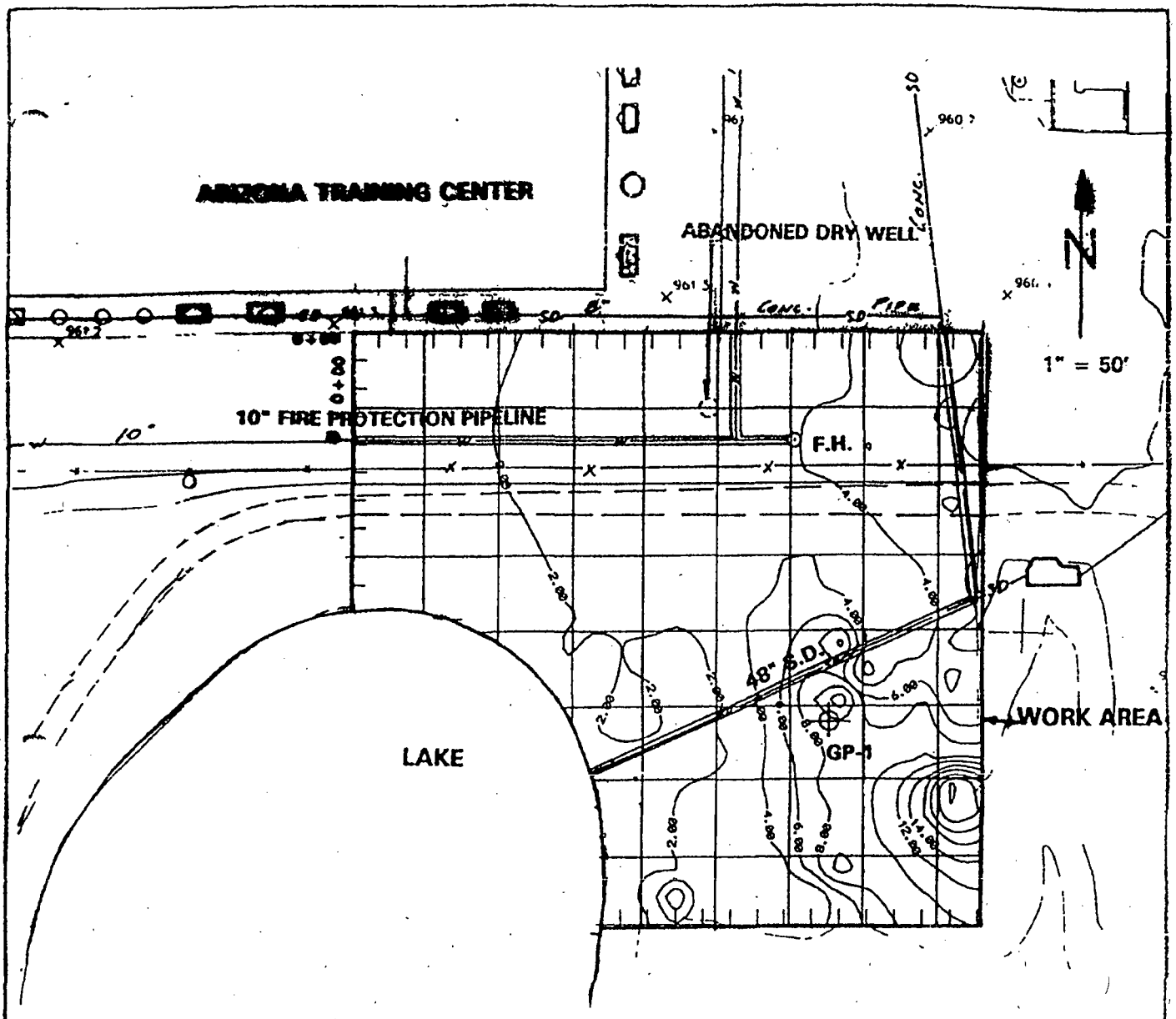
CHROMIUM LEVELS mg/kg

EXCAVATED AREA

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH [illegible]

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street, Suite F
PHOENIX, ARIZONA 85016
(602) 957-0205

FIGURE 3



AS BUILT

ISOPLETH MAP

CADMIUM LEVELS mg/kg

EXCAVATED AREA

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-9288

FIGURE 4

BARTHOLOMEW ENGINEERING, INC.
4120 North 20 Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

SHEET NO 1 OF 2
CALCULATED BY CINDY DATE 7/14/93
CHECKED BY DATE
SCALE

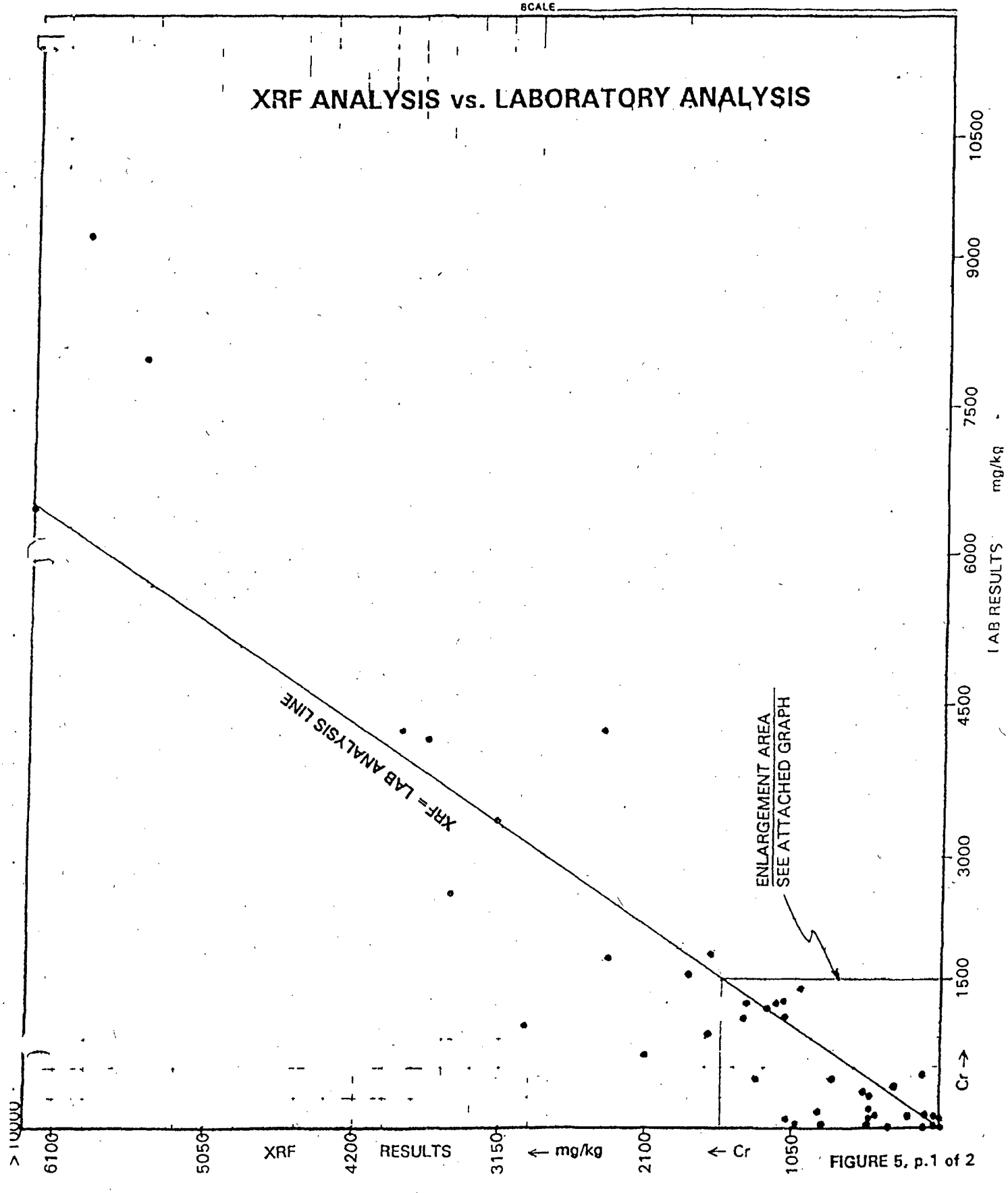


FIGURE 5, p.1 of 2

BARTHOLOMEW ENGINEERING, INC.
4120 North 20 Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

SHEET NO. 2 OF 2
CALCULATED BY CINDY DATE 7/14/93
CHECKED BY DATE
SCALE

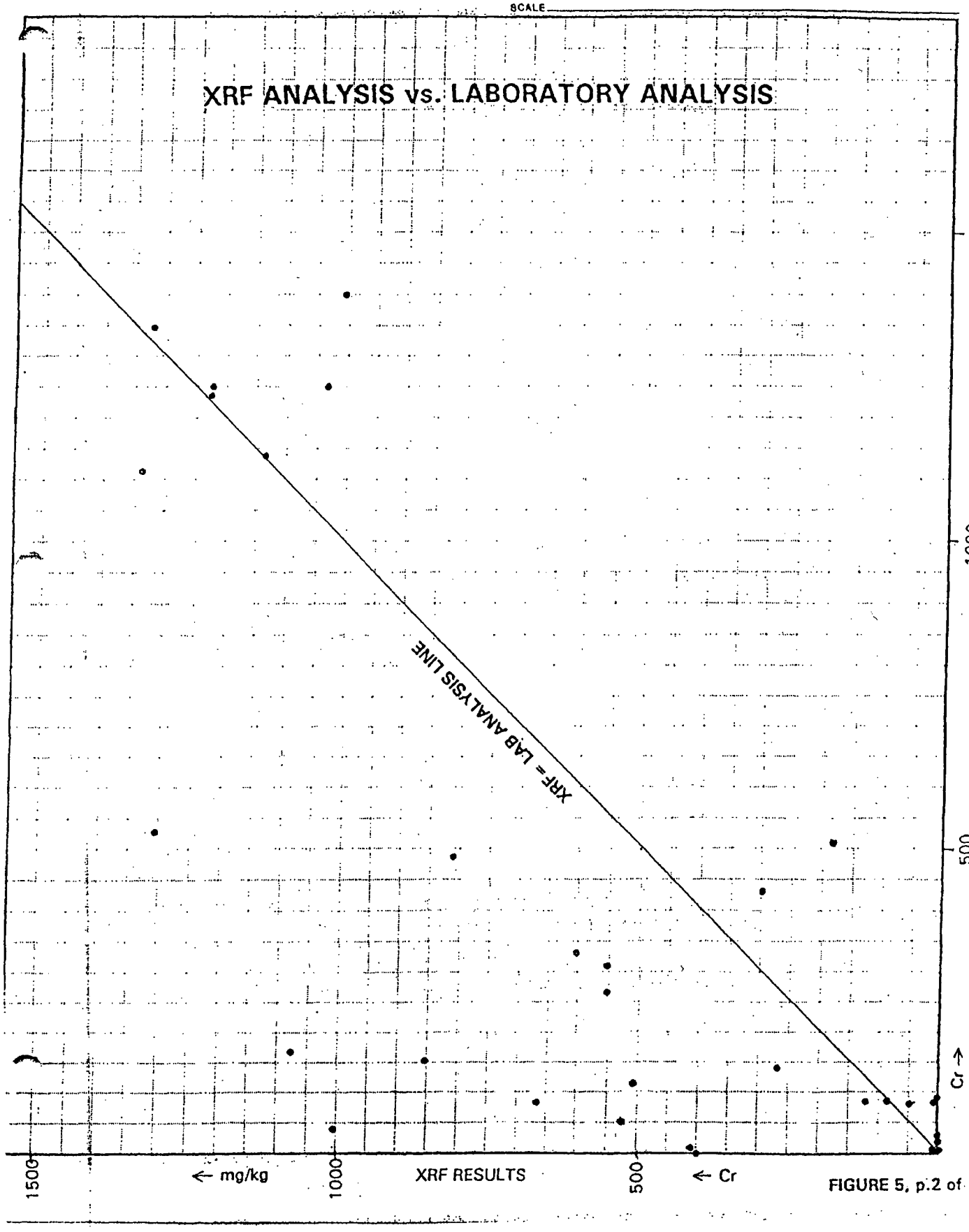
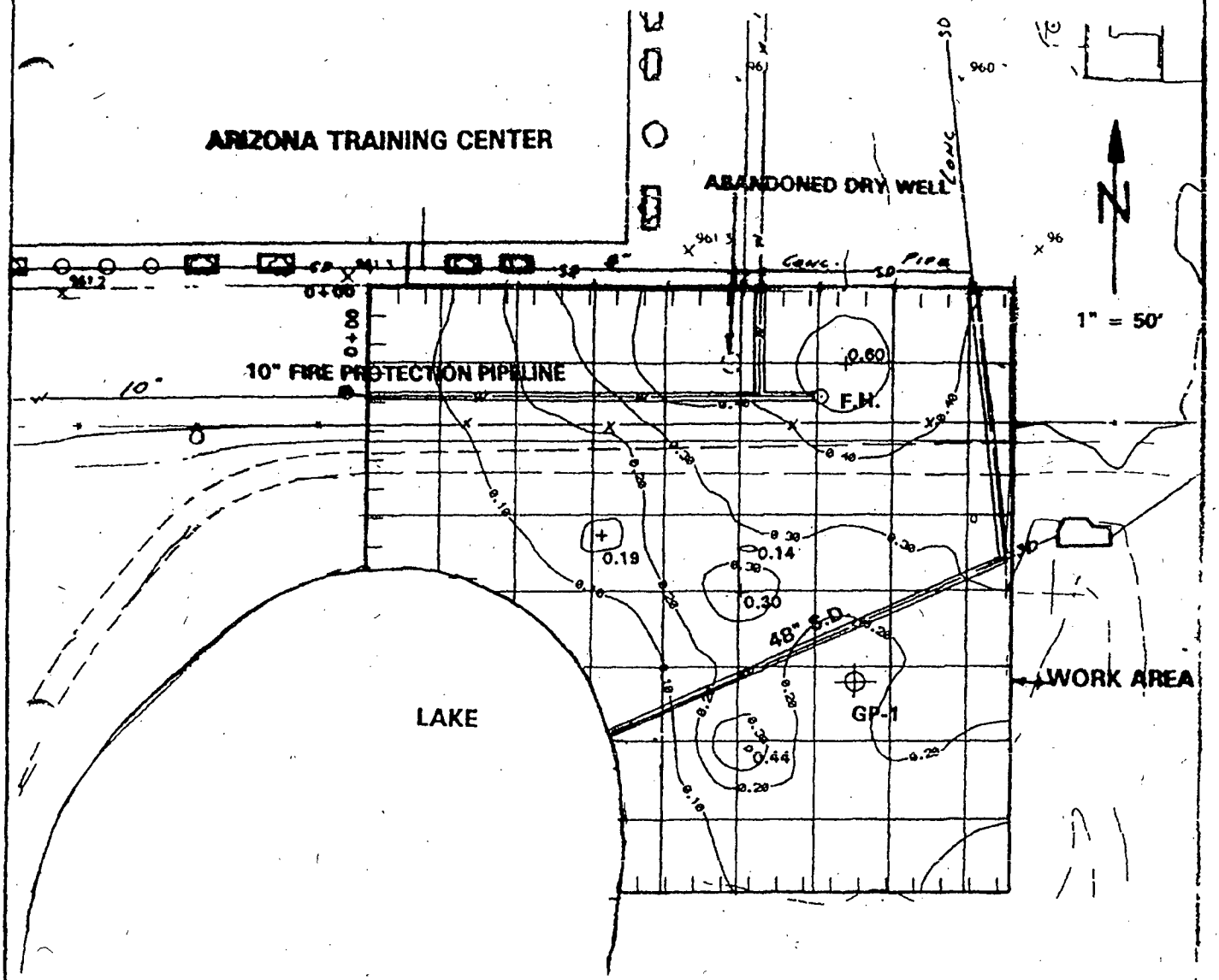


FIGURE 5, p.2 of 2



AS BUILT

ISOPLETH MAP

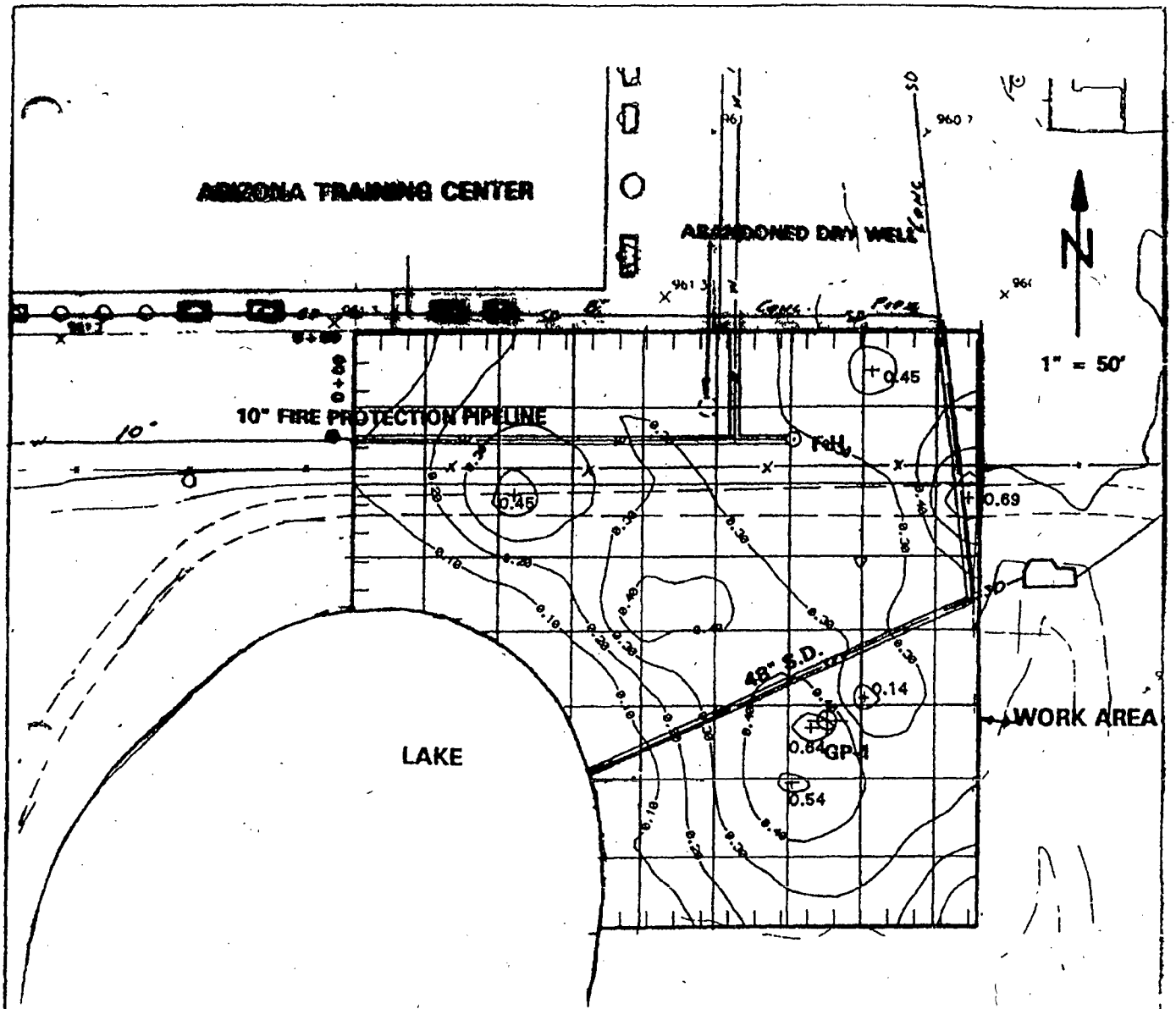
TCLP CHROMIUM LEVELS mg/kg

STABILIZATION - DEPTH 0-1'

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH [illegible]

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

FIGURE 6



AS BUILT

ISOPLETH MAP

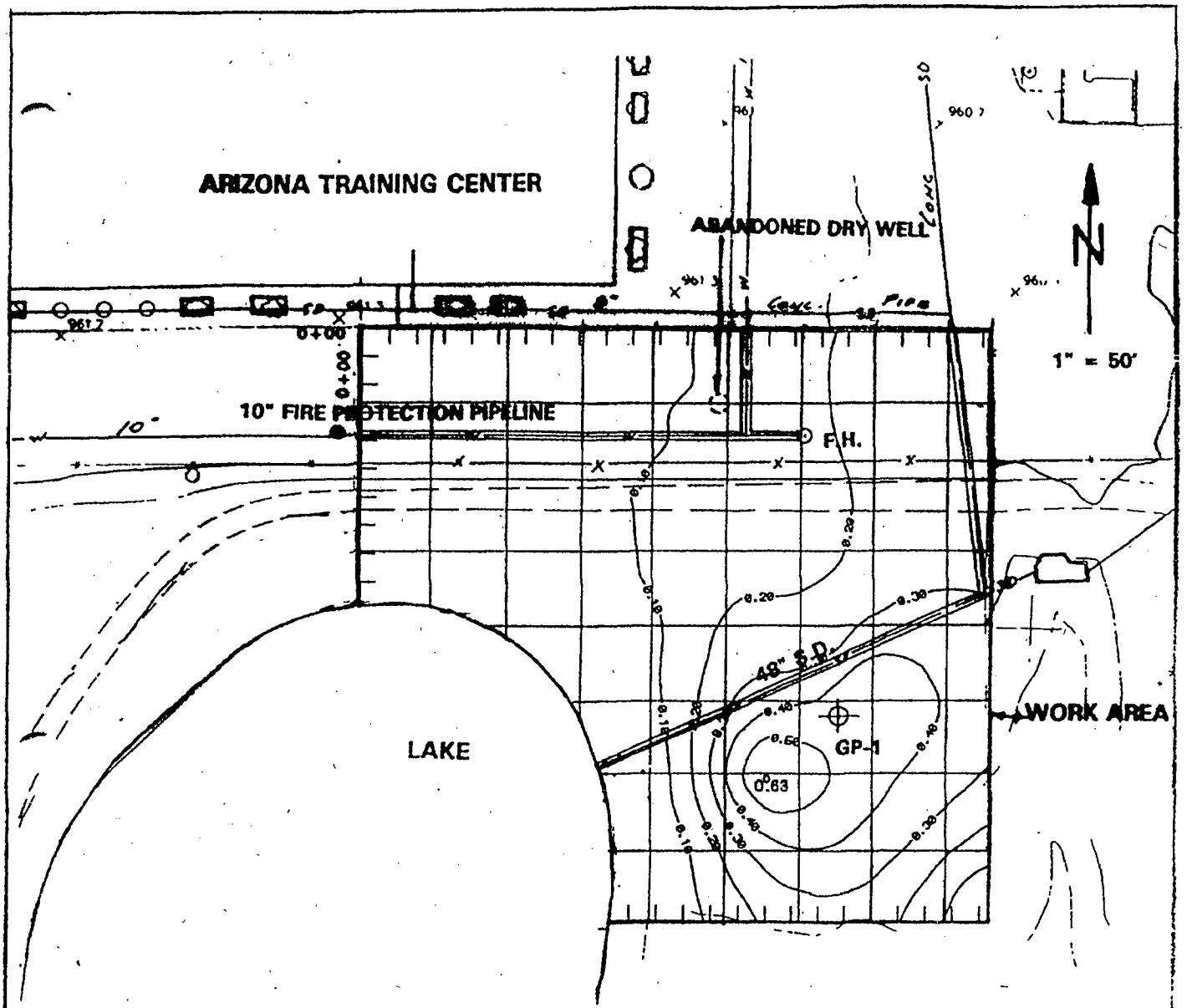
TCLP CHROMIUM LEVELS mg/kg

STABILIZATION - DEPTH 1-2

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CHROMIUM
REMEDIAL ACTION
FINAL REPORT
PREPARED REPORT
MARICOPA, AZ

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

FIGURE 7



AS BUILT

ISOPLETH MAP

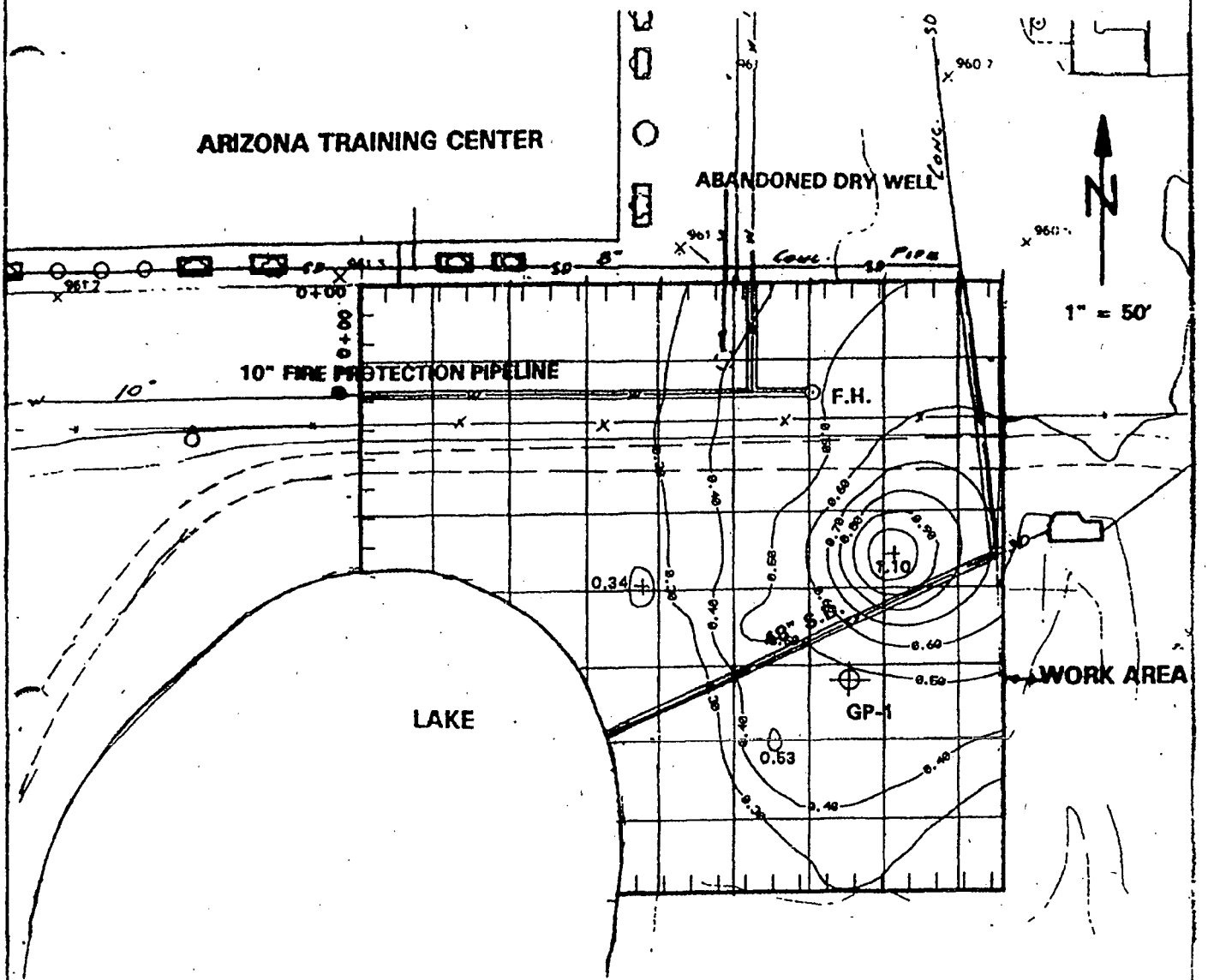
TCLP CHROMIUM LEVELS mg/kg

STABILIZATION - DEPTH 2-3'

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH 91/92

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

FIGURE 8



AS BUILT

ISOPLETH MAP

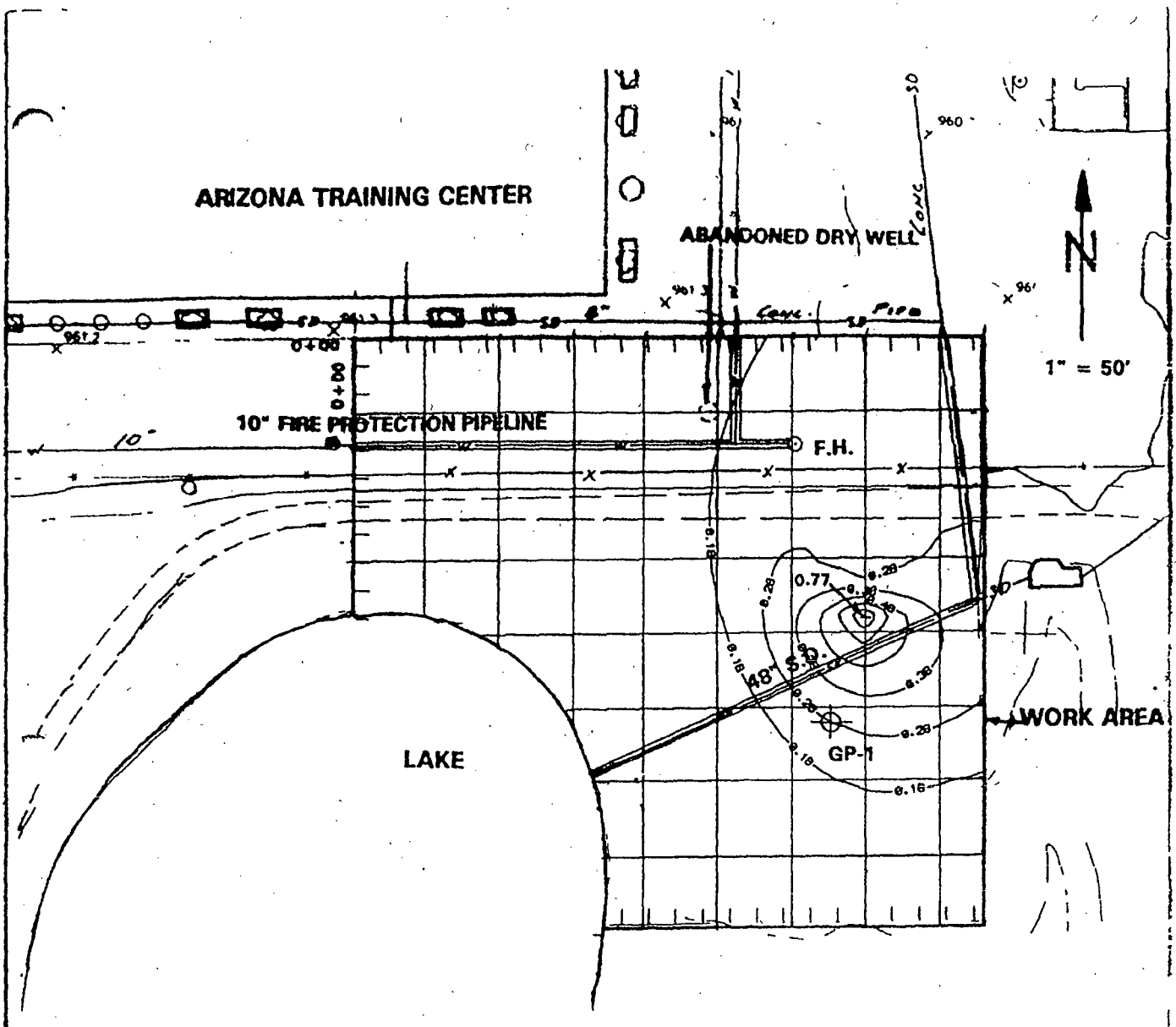
TCLP CHROMIUM LEVELS mg/kg

STABILIZATION - DEPTH 3-4'

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH 24, 2000

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0206

FIGURE 9



AS BUILT

ISOPLETH MAP

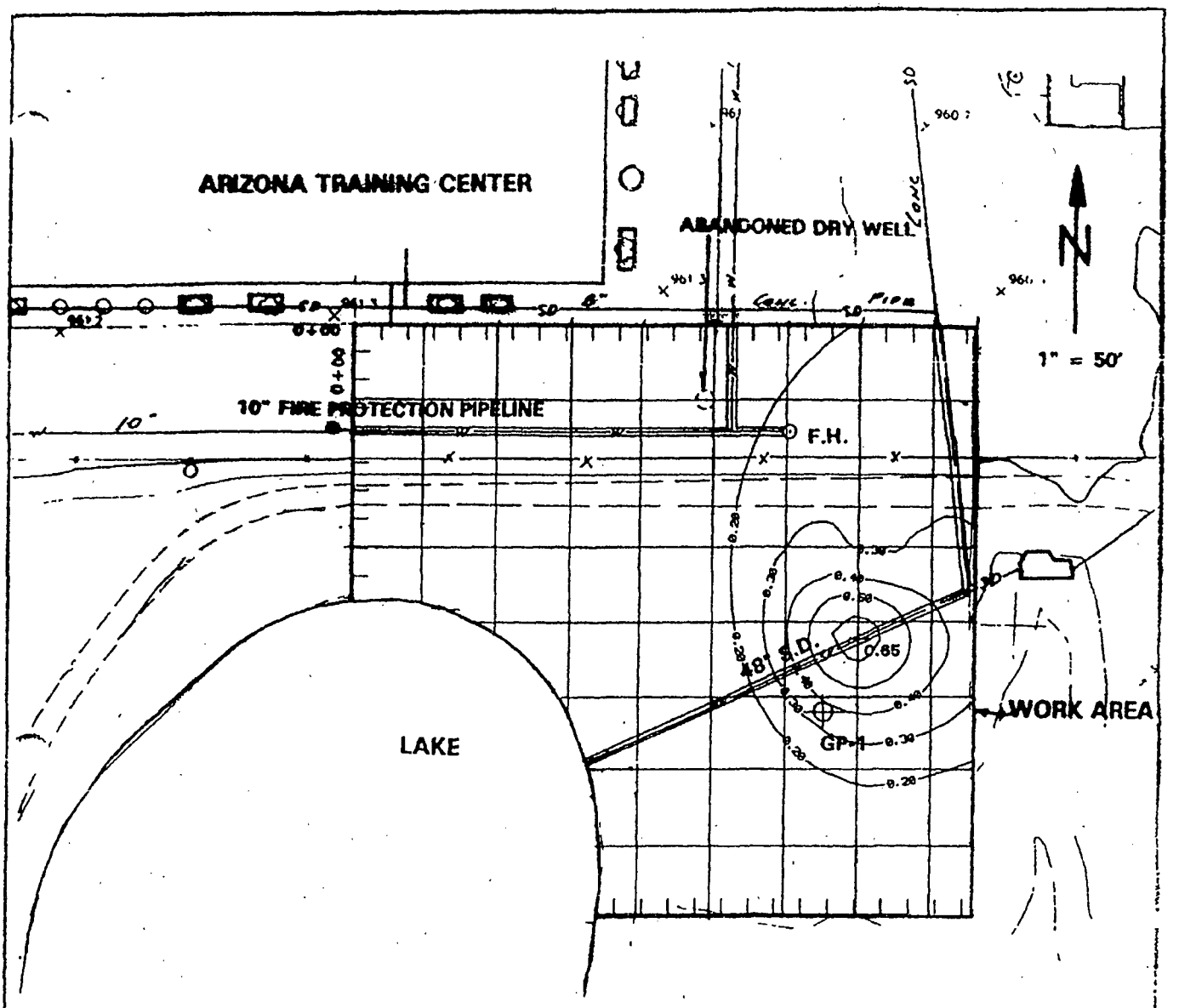
TCLP CHROMIUM LEVELS mg/kg

STABILIZATION - DEPTH 4-5'

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH 26,1998

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

FIGURE 10



AS BUILT

ISOPLETH MAP

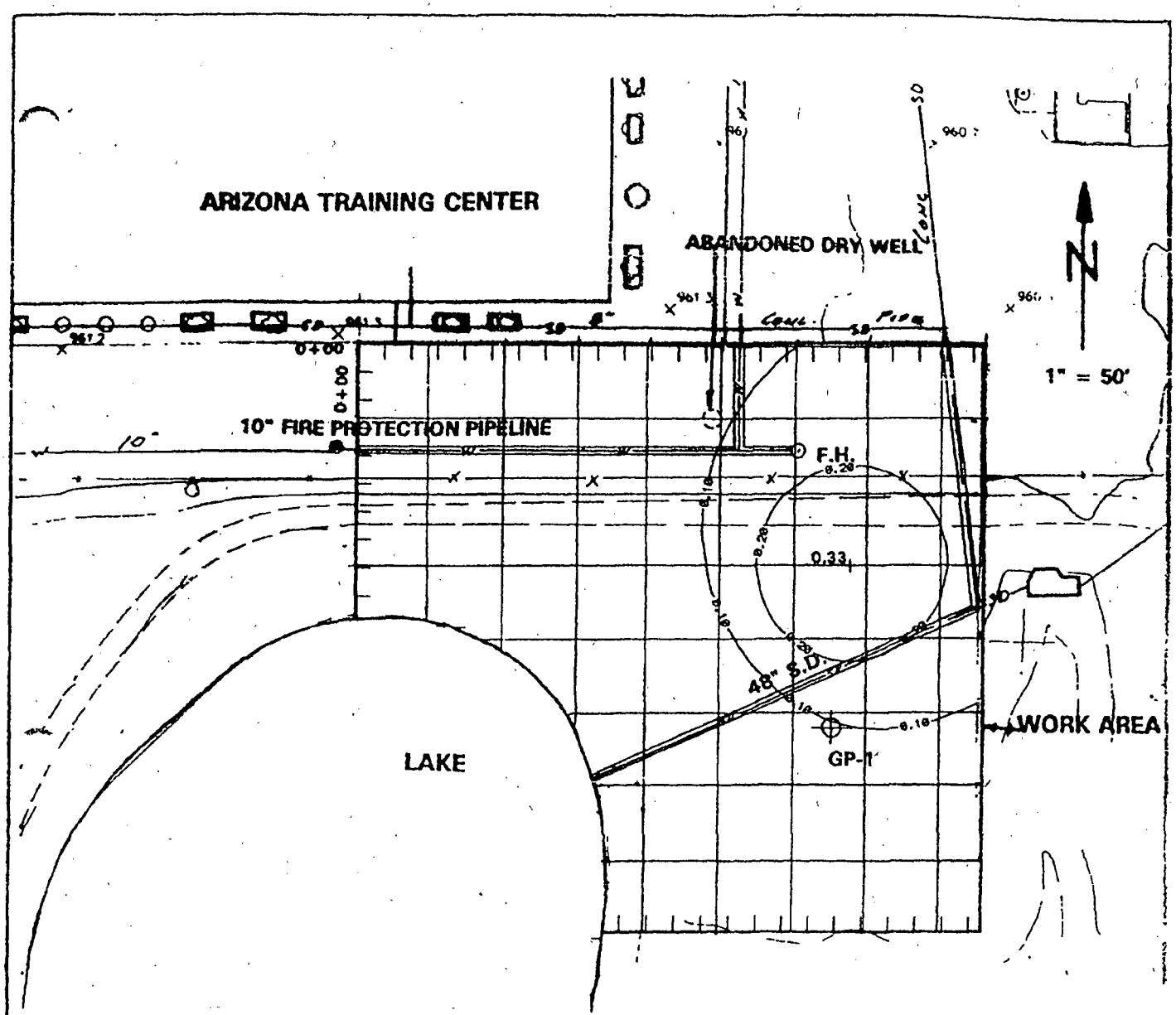
TCLP CHROMIUM LEVELS mg/kg

STABILIZATION - DEPTH 5-6 '

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH [illegible]

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

FIGURE 11



AS BUILT

ISOPLETH MAP

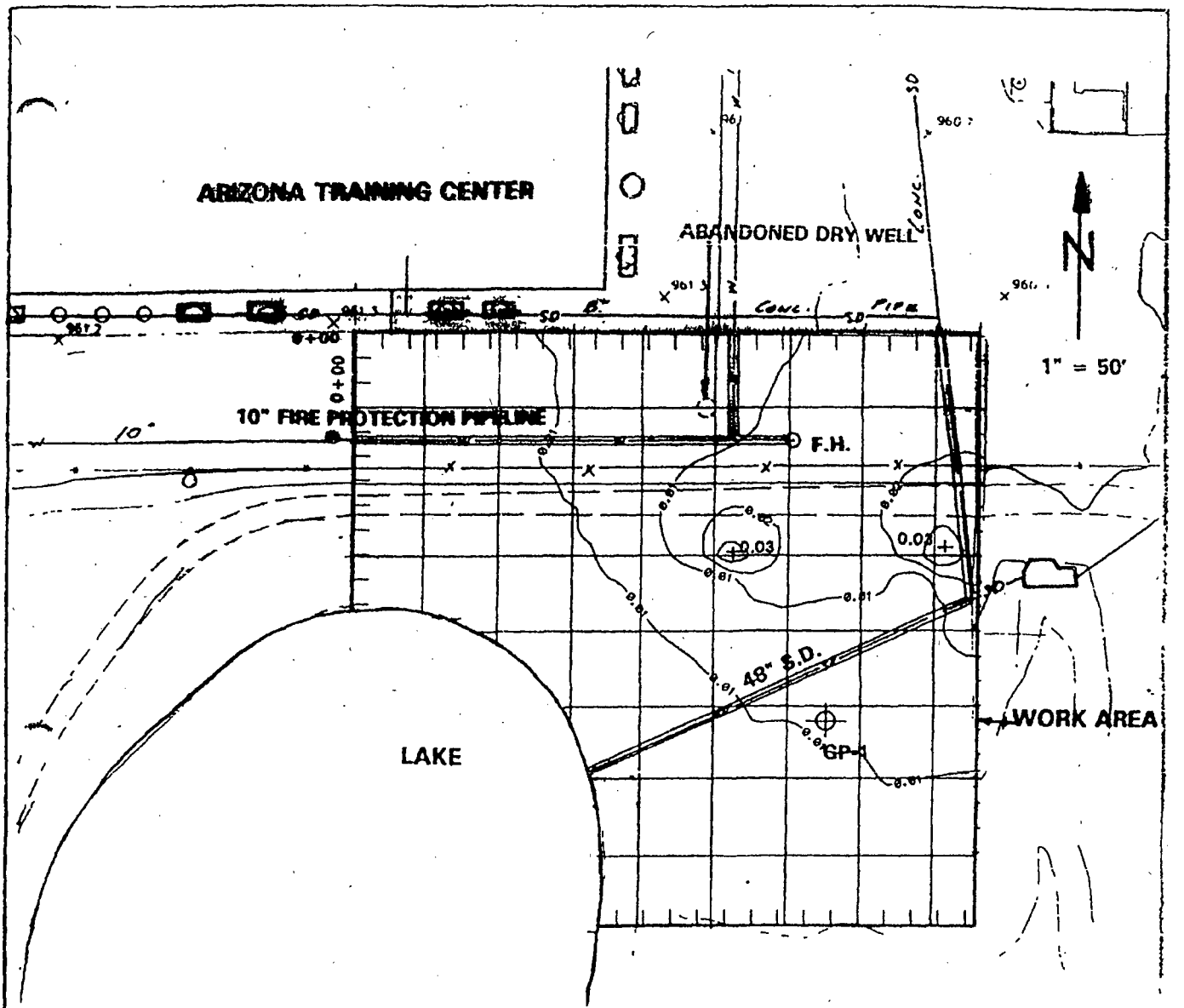
TCLP CHROMIUM LEVELS mg/kg

STABILIZATION - DEPTH 6-7'

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH 31, 1988

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

FIGURE 12



AS BUILT

ISOPLETH MAP

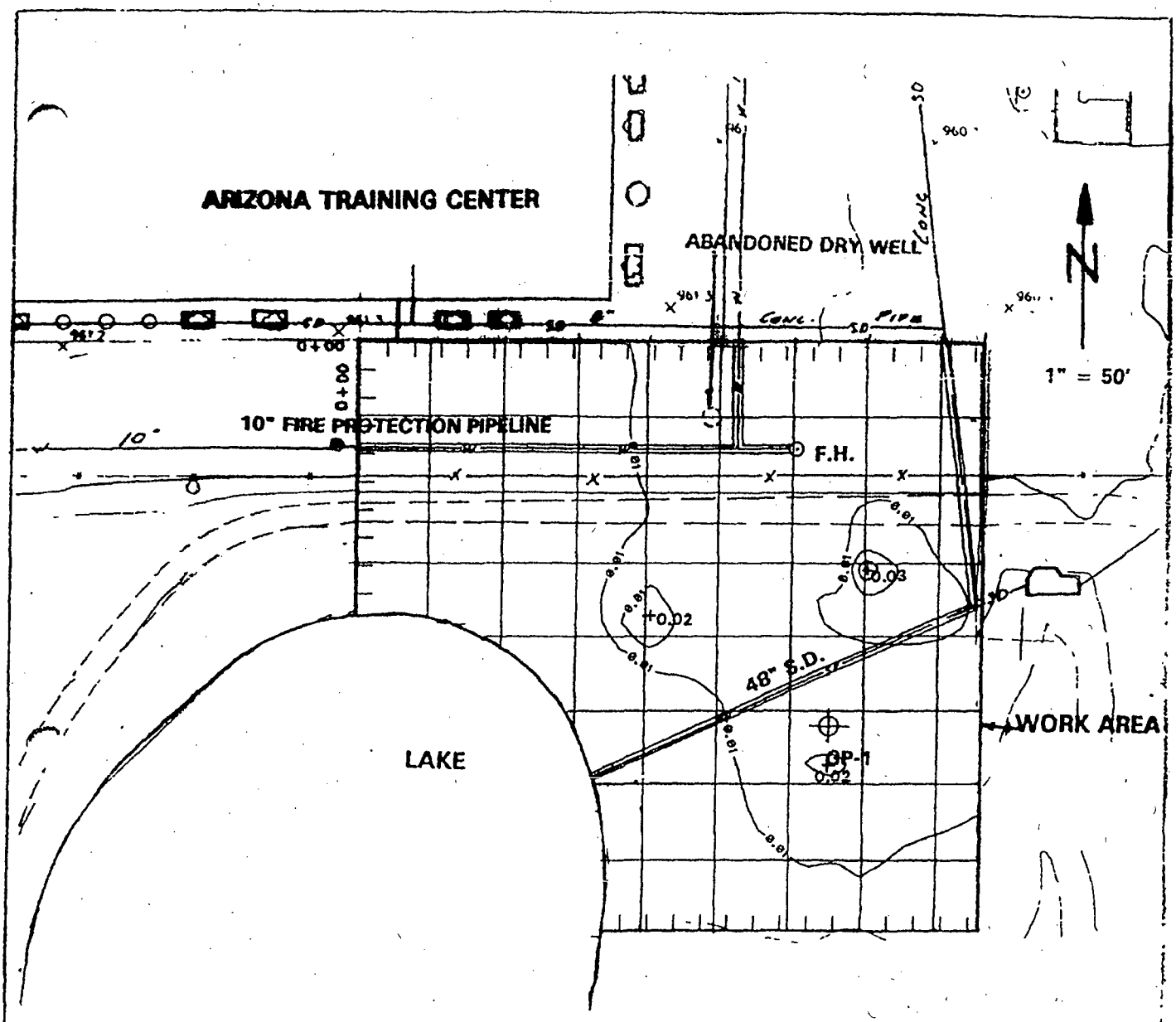
TCLP CADMIUM LEVELS mg/kg

STABILIZATION - DEPTH 0-1'

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH 24,

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

FIGURE 13



AS BUILT

ISOPLETH MAP

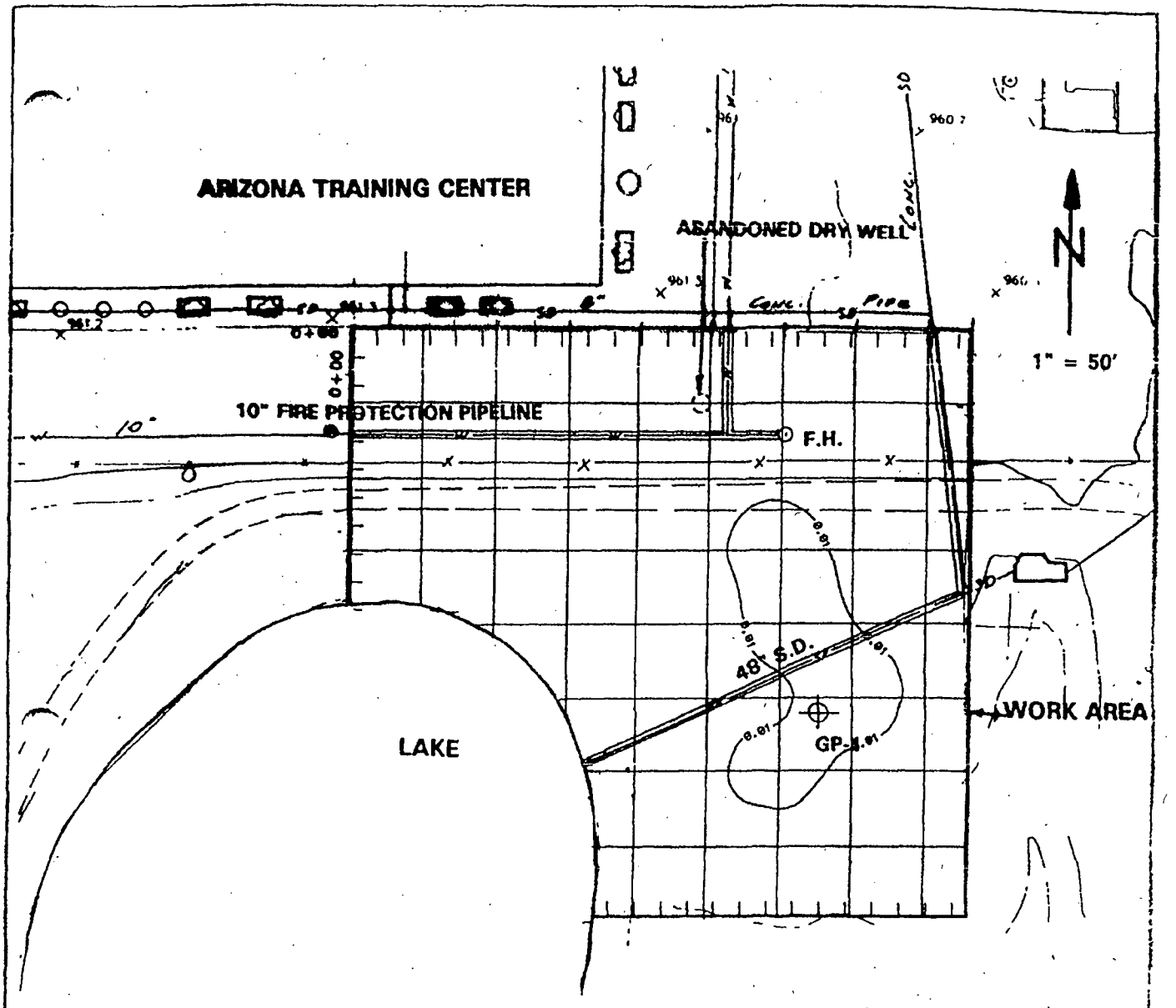
TCLP CADMIUM LEVELS mg/kg

STABILIZATION - DEPTH 1-2 '

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH 31,1989

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

FIGURE 14



AS BUILT

ISOPLETH MAP

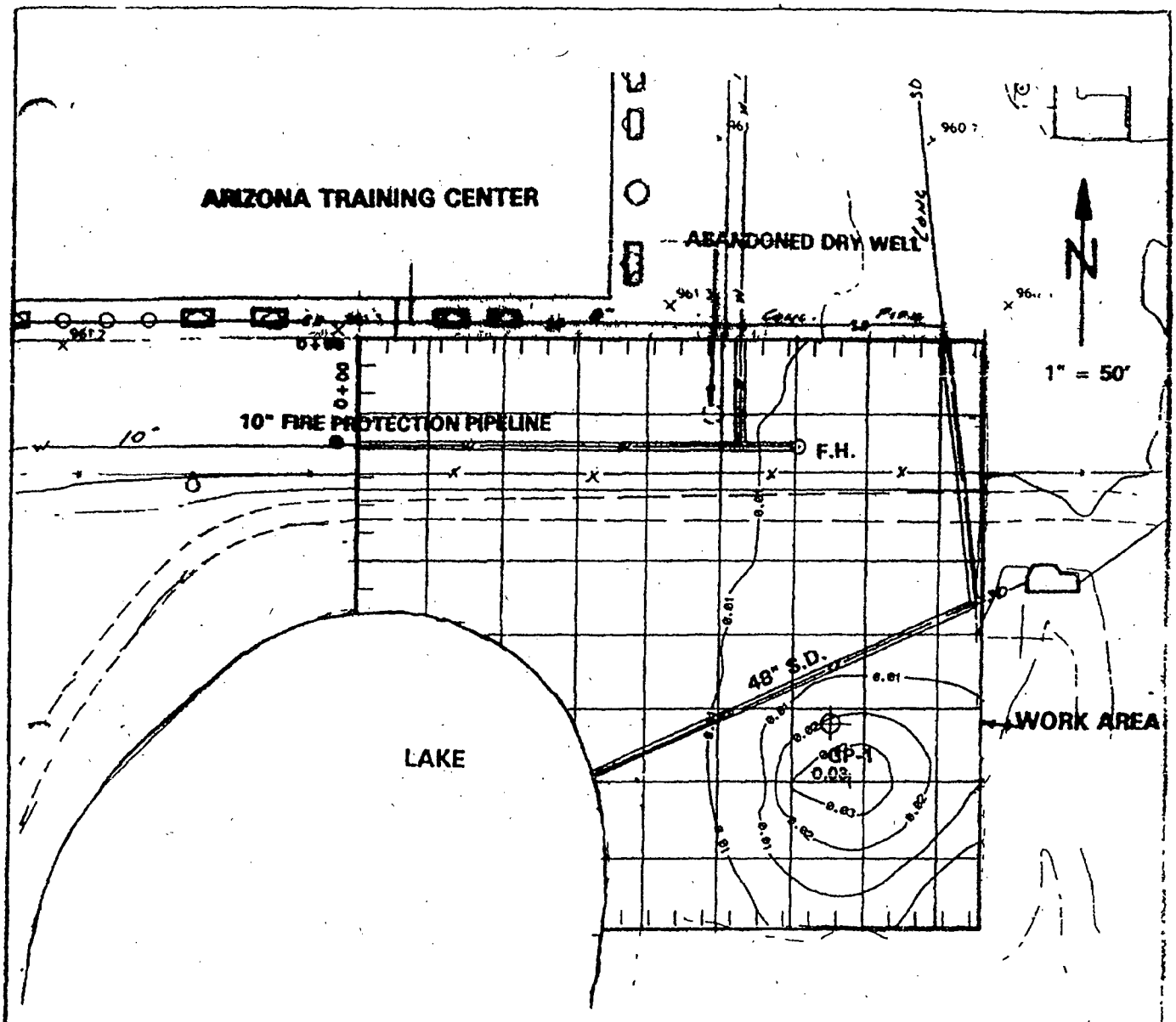
TCLP CADMIUM LEVELS mg/kg

STABILIZATION - DEPTH 2-3'

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH 30,1995

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

FIGURE 15



AS BUILT

ISOPLETH MAP

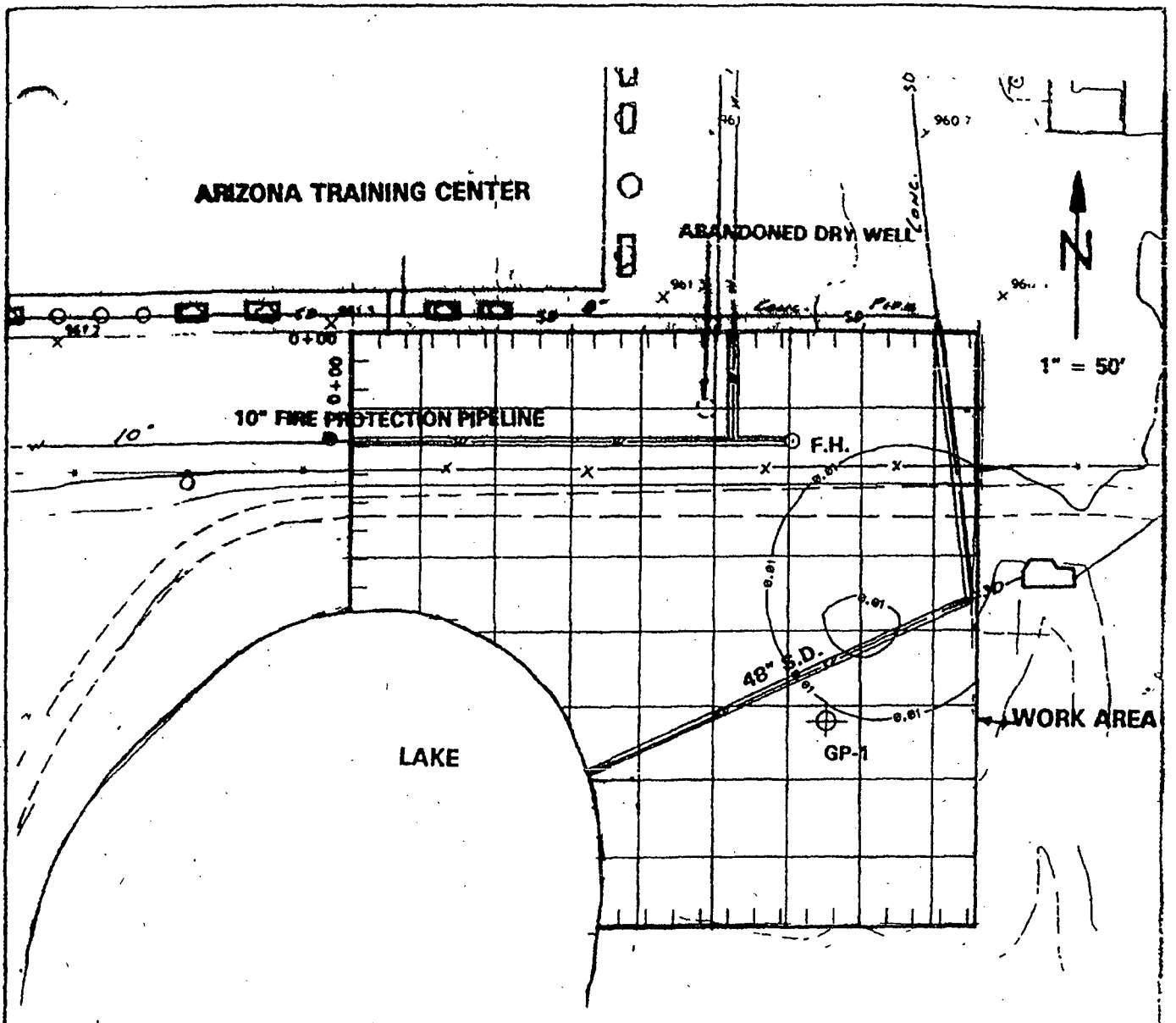
TCLP CADMIUM LEVELS mg/kg

STABILIZATION - DEPTH 3-4'

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH 31, 1993

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

FIGURE 16



AS BUILT

ISOPLETH MAP

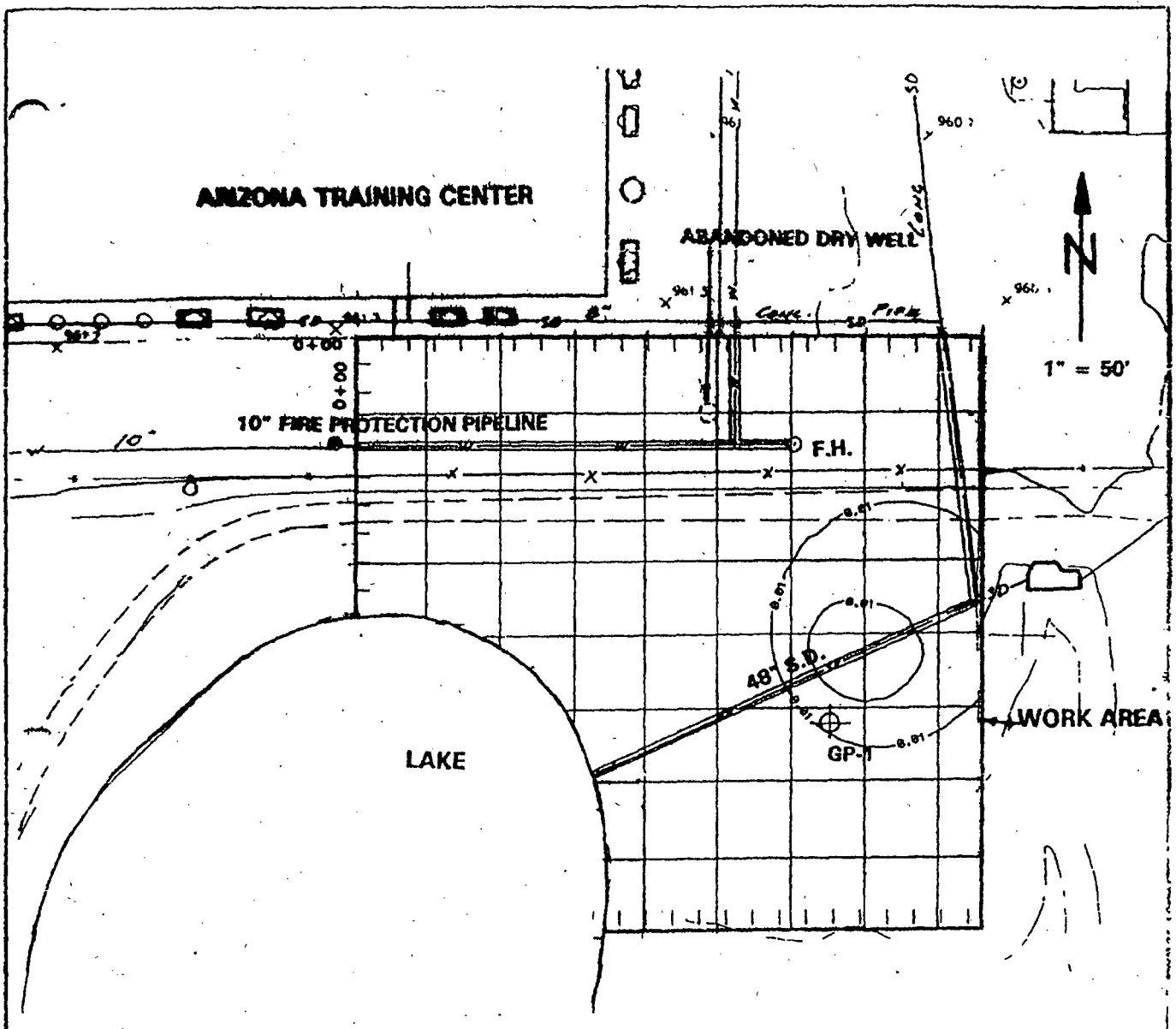
TCLP CADMIUM LEVELS mg/kg

STABILIZATION - DEPTH 4-5 '

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH 31,1995

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0200

FIGURE 4-4



AS BUILT

ISOPLETH MAP

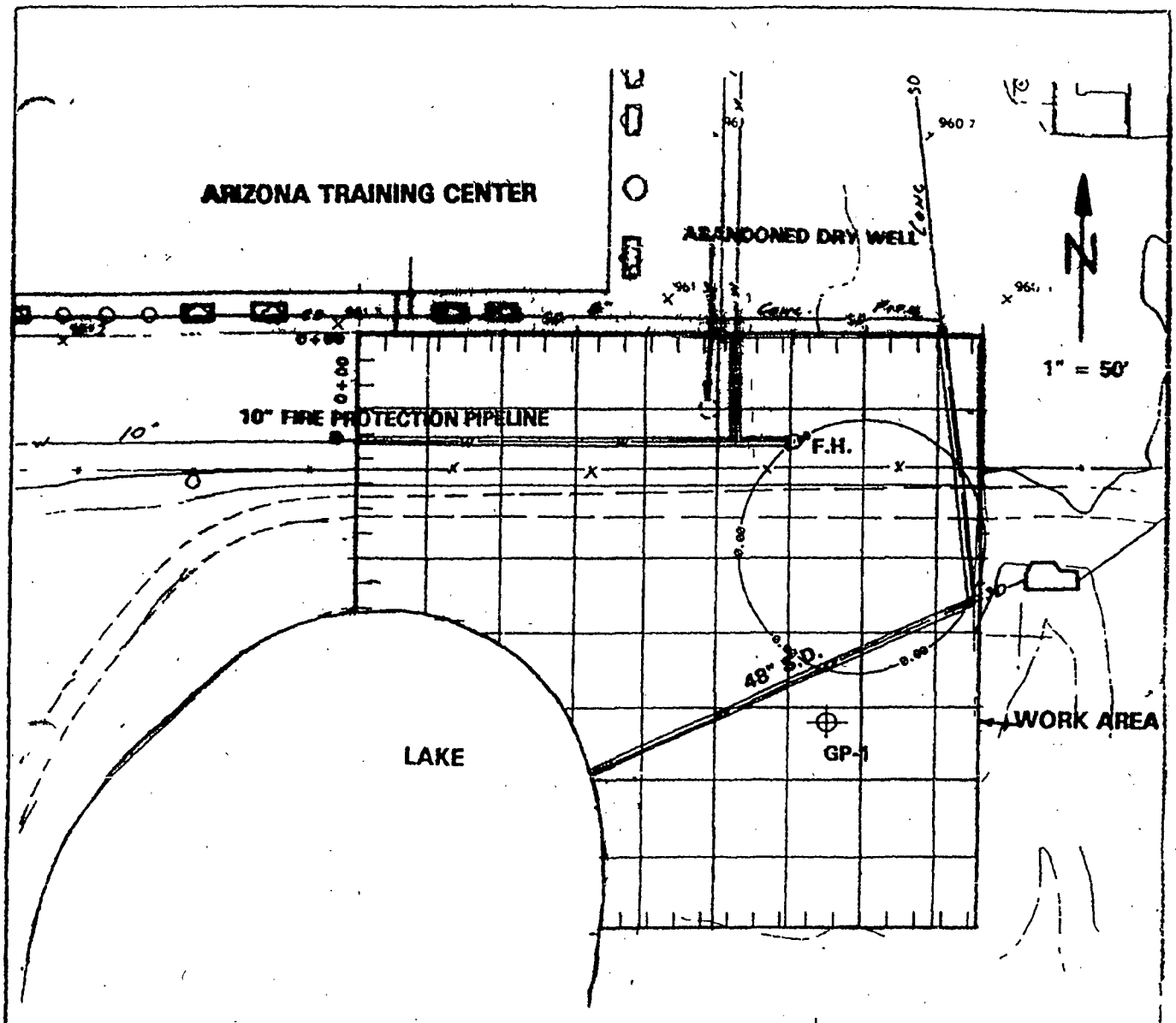
TCLP CADMIUM LEVELS mg/kg

STABILIZATION - DEPTH 5-6

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH [illegible]

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

FIGURE 10



AS BUILT

ISOPLETH MAP

TCLP CADMIUM LEVELS mg/kg

STABILIZATION - DEPTH 6-7

PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH 31, 1995

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

FIGURE 10

TABLES

TABLE 1

EXCAVATION VERIFICATION RESULTS

VERIFICATION SAMPLES											
GRID NO.	SAMPLE NO.	SAMPLE TYPE	LAB RESULTS mg/kg		XRF RESULTS mg/kg		DATE	EAST	SOUTH	ELEVATION	ACCESSION # ATI OR DAL
			Cr	Cd	Cr	Cd					
1	621-V	V	528		1101		7/14/92	0+46	0+21	960.0	207789-ATI
1	686-V	V		<0.3		11.2	7/16/92	0+29	0+42	957.6	207889-ATI
2	622-V	V	26.4		159		7/14/92	0+79	0+32	959.1	207889-ATI
2	667-V	V		2.5		8.9	7/16/92	0+79	0+32	959.1	207889-ATI
6	623-V	V	59.9		258		7/14/92	0+08	0+57	956.55	207889-ATI
6	668-V	V		<0.3		8.412	7/16/92	0+09	0+82	954.6	207889-ATI
7	624-V	V	204		395.5		7/14/92	0+91	0+56	953.49	207889-ATI
7	669-V	V		<0.3		8.093	7/16/92	0+92	0+93	955.6	207889-ATI
10	665-V-W	V	52.4	1.4	786	8.324	7/15/92	1+90	1+00	953.39	207889-ATI
13	686-V-W	V	32.5	0.4	579.3	6.4	7/16/92	1+75	1+14	953.40	207889-ATI
13	687-V-W (DUP) OF 686-V-W	V	27.9	0.3	579.3	6.4	7/16/92	1+75	1+14	953.40	207889-ATI
13	708-V-W	V	21.9	1.25			7/17/92	1+75	1+00	952.8	207066-ATI

V = VERIFICATION - SAMPLE FLOOR OF EXCAVATION
* = RESAMPLED
ATI = ANAYLITCAL TECHNOLOGIES LABORATORY
DAL = DALARE ASSOCIATES LABORATORY
W = WALL EXCAVATION SAMPLE
Cr = TOTAL CHROMIUM
Cd = CADMIUM
DUP = DUPLICATE

Table 1 (Continued)

PHOENIX - GOODYEAR - AIRPORT SUPERFUND SITE
CHROMIUM/CADMIUM RESPONSE PLAN

Loral Chrome Job #051290

VERIFICATION SAMPLES											
GRID NO.	SAMPLE NO.	SAMPLE TYPE	LAB RESULTS mg/kg		XRF RESULTS mg/kg		DATE	EAST	SOUTH	ELEVATION	ACCESSION # ATI OR DAL
			Cr	Cd	Cr	Cd					
12	709-V-W	V	34.8	1.90			7/17/92	1+27	1+39	951.7	207066-ATI
3	966-V-W	V	17.5		126.4		7/30/92	1+24	0+00	959.85	1159-DAL
3	982-V	V	25.0	3.0	409.2	9.3	7/30/92	1+16	0+49	956.5	1159-DAL
4	978-V-W	V	18.5		846		7/30/92	1+88	0+23	958.6	1159-DAL
4	993-V	V	15.3		5.7		7/30/92	1+68	0+05	956.95	1159-DAL
7	1011-V	V	265	3.8	407		7/31/92	0+88	0+69	956.8	1167-DAL
7	1024-V	V	24.3	3.2	94.96	5.8	7/31/92	0+97	0+87	954.2	1167-DAL
11	1029-V	V	187	2.5	772	9.9	7/31/92	0+91	1+26	950.8	1167-DAL
11	1034-V	V	51.2	2.6	411	5.75	7/31/92	0+90	1+27	953.4	1167-DAL
8	998-V	V	57.8	2.6	1397	6.863	7/31/92	1+25	0+72	959.9	1167-DAL
9	1176-V	V	334	3.7	7.315	6.4	8/6/92	1+74	0+72	953.74	1205-DAL
9	1177-V	V	112	3.2	225.8	8.7	8/6/92	1+71	0+85	953.34	1205-DAL
10	1179-V	V	187	8.9	1691	10.58	8/6/92	2+24	0+84	957.9	1205-DAL
11	1180-V	V	29	1.9	772	9.89	8/6/92	0+75	1+14	950.69	1205-DAL

V = VERIFICATION - SAMPLE FLOOR OF EXCAVATION
* = RESAMPLED
ATI = ANAYLITCAL TECHNOLOGIES LABORATORY
DAL = DALARE ASSOCIATES LABORATORY
W = WALL EXCAVATION SAMPLE
Cr = TOTAL CHROMIUM
Cd = CADMIUM
DUP = DUPLICATE

Table 1 (Continued)

PHOENIX - GOODYEAR - AIRPORT SUPERFUND SITE
CHROMIUM/CADMIUM RESPONSE PLAN

Loral Chrome Job #051290

VERIFICATION SAMPLES											
GRID NO.	SAMPLE NO.	SAMPLE TYPE	LAB RESULTS mg/kg		XRF RESULTS mg/kg		DATE	EAST	SOUTH	ELEVATION	ACCESSION # ATI OR DAL
			Cr	Cd	Cr	Cd					
11	QA/QC 1150-V	V	33	2.1	772	9.89	8/7/92	0+75	1+14	950.69	1205-DAL
5	1212-V	V	46	24.8	642.2	9.49	8/6/92	2+07	0+30	960.04	1205-DAL
5	1213-V-dup of 1212V	V	43	24.2	642.2	9.49	8/7/92	2+07	0+30	960.04	1205-DAL
	1214-V	V	24	3.1	120	12.5	8/7/92	2+04	0+11	959.94	1205-DAL
5	1221-V	V	23.4	10.0	395	11.66	8/17/92	2+12	0+31	958.59	1252-A-DAL
11	1215-V-W	V	18.1	3.2	161	10.02	8/17/92	0+74	1+12	953.59	1252-A-DAL
11	1211-V-W	V	229	3.5	411	5.75	8/17/92	0+93	1+29	953.49	1252-A-DAL
10	*1132-V-RESAMPLE	V	181	3.8	1202	8.47	8/17/92	2+07	0+59	956.5	1252-A-DAL
13	1240-V	V	808	13.9	907.3	9.942	8/17/92	1+67	1+22	953.0	1252-A-DAL
13	1175-V	V	449	11.2	880	10.57	8/17/92	1+68	1+03	953.3	1252-A-DAL
12	1145-V	V	44.4	1.2	657	9.3	8/17/92	1+19	1+23	954.6	1252-A-DAL
12	1142-V	V	30.9	1.5	5.987	9.7	8/17/92	1+09	1+08	954.8	1252-A-DAL
14	1263-V	V	198	5.8	489.4	6.371	8/17/92	2+09	1+35	958.14	1252-A-DAL

V = VERIFICATION - SAMPLE FLOOR OF EXCAVATION
* = RESAMPLED
ATI = ANAYLITCAL TECHNOLOGIES LABORATORY
DAL = DALARE ASSOCIATES LABORATORY
W = WALL EXCAVATION SAMPLE
Cr = TOTAL CHROMIUM
Cd = CADMIUM
DUP = DUPLICATE

Table 1 (Continued)

PHOENIX - GOODYEAR - AIRPORT SUPERFUND SITE
CHROMIUM/CADMIUM RESPONSE PLAN

Loral Chrome Job #051290

VERIFICATION SAMPLES											
GRID NO.	SAMPLE NO.	SAMPLE TYPE	LAB RESULTS mg/kg		XRF RESULTS mg/kg		DATE	EAST	SOUTH	ELEVATION	ACCESSION # ATI OR DAL
			Cr	Cd	Cr	Cd					
14	1266-V	V	158	7.5	224.2	9.924	8/17/92	2+10	1+06	956.74	1252-A-DAL
15	1164-V-W	V	274	0.9	563	8.8	8/17/92	0+98	1+57	953.18	1252-A-DAL
15	1163-V	V	237	2.2	274	10.7	8/17/92	0+98	1+53	953.54	1252-A-DAL
15	1165-V	V	229	2.1	345	5.4	8/17/92	0+98	1+55	951.49	1252-A-DAL
15	1169-V	V	194	1.2	275.1	9.615	8/17/92	0+98	1+73	950.74	1252-A-DAL
17	1192-V	V	17.3	1.9	1678	9.0	8/17/92	1+58	1+86	952.3	1252-A-DAL
18	1261-V	V	707	25.2	632.8	8.905	8/17/92	2+08	1+56	958.14	1252-A-DAL
16	1171-V	V	44.0	<0.5	509.2	6.98	8/17/92	1+11	1+80	952.15	1252-A-DAL
16	1172-V	V	28.8	1.7	509.2	6.98	8/17/92	1+11	1+80	952.15	1252-A-DAL
16	1170-V	V	18.4	1.1	327.9	9.8	8/17/92	1+14	1+89	957.9	1252-A-DAL
14	1273-V-W	V	27.8	2.4	298.3	6.788	8/17/92	2+09	1+22	956.34	1252-A-DAL
14	QA/QC 1273 V-W	V	24.5	2.0	298.3	6.788	8/17/92	2+09	1+22	956.34	1252-A-DAL
14	1272-V-W	V	37.3	2.8	140.5	9.433	8/17/92	2+09	1+17	956.94	1252-A-DAL
13	1274-V-W	V	1010	10.6	823.8	11.32	8/17/92	1+98	1+29	956.14	1252-A-DAL

V = VERIFICATION - SAMPLE FLOOR OF EXCAVATION
* = RESAMPLED
ATI = ANAYLITCAL TECHNOLOGIES LABORATORY
DAL = DALARE ASSOCIATES LABORATORY
W = WALL EXCAVATION SAMPLE
Cr = TOTAL CHROMIUM
Cd = CADMIUM
DUP = DUPLICATE

Table 1 (Continued)

PHOENIX - GOODYEAR - AIRPORT SUPERFUND SITE
CHROMIUM/CADMIUM RESPONSE PLAN

Loral Chrome Job #051290

VERIFICATION SAMPLES											
GRID NO.	SAMPLE NO.	SAMPLE TYPE	LAB RESULTS mg/kg		XRF RESULTS mg/kg		DATE	EAST	SOUTH	ELEVATION	ACCESSION # ATI OR DAL
			Cr	Cd	Cr	Cd					
17	1278-V-W	V	50.0	10.9	69.33	10.56	8/17/92	1+67	1+80	954.64	1252-A-DAL
17	1279-V-W	V	21.7	1.9	411.9	8.391	8/17/92	1+60	1+91	954.04	1252-A-DAL
16	1282-V-W	V	19.8	1.1	606.2	9.440	8/17/92	1+24	1+92	954.24	1252-A-DAL
16	1280-V-W	V	15.7	2.9	559.6	7.585	8/17/92	1+43	1+85	954.54	1252-A-DAL
16	1283-V-W	V	92.9	1.5	529.1	8.507	8/17/92	1+07	1+87	953.54	1252-A-DAL

V = VERIFICATION - SAMPLE FLOOR OF EXCAVATION
* = RESAMPLED
ATI = ANAYLITCAL TECHNOLOGIES LABORATORY
DAL = DALARE ASSOCIATES LABORATORY
W = WALL EXCAVATION SAMPLE
Cr = TOTAL CHROMIUM
Cd = CADMIUM
DUP = DUPLICATE

PHOENIX - GOODYEAR -AIRPORT SUPERFUND SITE
CHROMIUM/CADMIUM RESPONSE PLAN

TABLE 2A

XRF- CALIBRATION SAMPLES FOR LORAL CHROME
PRE-CONSTRUCTION

DATE	SAMPLE LOCATION	SAMPLE TYPE	LAB RESULTS mg/kg Cr	Cd	ACCESSION #
3/30/92	LC-1	C	1550	29.6	203980
3/30/92	LC-2	C	24.8	<2.0	203980
3/30/92	LC-3	C	439	17.0	203980
3/30/92	LC-4	C	300	1.0	203980
3/30/92	LC-5	C	659	7.3	203980
3/30/92	LC-6	C	114	1.8	203980
3/30/92	LC-7	C	15.1	<2.0	203980
3/30/92	LC-8	C	46.0	<2.0	203980
3/30/92	LC-9	C	225	1.5	203980
3/30/92	LC-10	C	5220	29.0	203980
3/30/92	LC-11	C	296	11.8	203980
3/30/92	LC-12	C	2730	7.2	203980
3/30/92	LC-13	C	8210	46.1	203980
3/30/92	LC-14	C	16.0	<0.5	203980
3/30/92	LC-15	C	18.0	0.5	203980
3/30/92	LC-16	C	97.1	3.8	203980
3/30/92	LC-17	C	1400	32.3	203980
3/30/92	LC-18	C	185	4.4	203980
3/30/92	LC-19	C	204	3.7	203980
3/30/92	LC-20	C	35.6	0.7	203980
5/22/92	LC-21	C	14.4		205965
5/22/92	LC-22	C	78.6		205965
5/22/92	LC-23	C	381		205965

C = CALIBRATION XRF INSTRUMENT

Table 2A (Continued)

DATE	SAMPLE LOCATION	SAMPLE TYPE	LAB RESULTS mg/kg Cr	Cd	ACCESSION #
5/22/92	LC-24	C	49.7		205965
5/22/92	LC-25	C	586		205965
6/2/92	10	C	13770		206520
6/2/92	13	C	10780		206520
6/9/92	LC10-A	C	4608		206652
6/9/92	LC10-B	C	2745		206652
6/9/92	LC10-C	C	3495		206652
6/9/92	LC10-D	C	1625		206652
6/9/92	LC10-E	C	2400		206652
6/9/92	LC10-F	C	1600		206652
6/9/92	LC13-A	C	8880		206652
6/9/92	LC13-B	C	2175		206652
6/9/92	LC13-C	C	998		206652
6/9/92	LC13-D	C	2620		206652
6/9/92	LC13-E	C	1935		206652
6/9/92	LC13-F	C	3335		206652

C = CALIBRATION XRF INSTRUMENT

PHOENIX-GOODYEAR-AIRPORT SUPERFUND SITE
CHROMIUM /CADMIUM RESPONSE PLAN

TABLE 2B
CALIBRATION SAMPLES FOR LORAL CHROME

DATE	SAMPLE LOCATION	SAMPLE TYPE	LAB RESULTS mg/kg Cr	XRF RESULTS mg/kg Cr	ACCESSION #
6/22/92	LC101	C	56.7		206915
6/22/92	LC102	C	53.0		206915
6/22/92	LC103	C	59.8		206915
6/22/92	LC104	C	57.1		206915
6/22/92	LC105	C	55.4		206915
6/22/92	LC106	C	55.9		206915
6/22/92	LC107	C	34300		206915
6/23/92	101	C	1250	1036	206943
6/23/92	102	C	89.7	10.75	206943
6/23/92	103	C	6470	>10000	206943
6/23/92	104	C	1630	1756	206943
6/23/92	105	C	88.2	559.13	206943
6/23/92	106	C	4.1	2.41	206943
6/24/92	107	C	27.0	0	206963
6/24/92	108	C	21.8	0	206963
6/24/92	109	C	14.3	0	206963
6/24/92	110	C	32.2	0	206963
6/30/92	111"C"	C	123	509	206066
6/30/92	112"C"	C	168	1077	206066
6/30/92	113"C"	C	11.4	409	206066
6/30/92	114"C"	C	265	556	206066
6/30/92	115 QA/QC FROM 114	C	315	556	206066
6/30/92	116"C"	C	7.2	409	206066

C = CALIBRATION XRF INSTRUMENT

Table 2B (Continued)

PHOENIX-GOODYEAR-AIRPORT SUPERFUND SITE
CHROMIUM /CADMIUM RESPONSE PLAN

DATE	SAMPLE LOCATION	SAMPLE TYPE	LAB RESULTS mg/kg Cr	XRF RESULTS mg/kg Cr	ACCESSION #
6/30/92	117"C"	C	1120	1345	206066
6/30/92	118"C"	C	8040	5700	206066
6/30/92	119"C"	C	3360	3200	206066
6/30/92	120"C"	C	515	180	206066
7/9/92	121"C"	C	138	263	207611
7/9/92	122"C"	C	430	301	207611
7/9/92	123"C"	C	88.6	52	207611
7/9/92	124"C"	C	87.2	79	207611
7/9/92	125"C"	C	88.2	126.1	207611
7/9/92	126"C"	C	96.8	0	207611
7/14/92	LG1	C	44300		207698
7/14/92	LRO1	C	13400		207698
7/17/92	571"C"	C	1400	1016	207789
7/17/92	579"C"	C	1080	2961	207789
7/17/92	588"C"	C	533	1307	207789
7/17/92	633"C"	C	156	856.5	207789
7/17/92	664"C"	C	56.1	531	207789
7/17/92	689"C"	C	1140	1143	207789
7/17/92	706"C"	C	41.3	1013	207789
7/20/92	718"C"	C	1230	1231	207808
7/21/92	751"C"	C	1250	1224	207855
7/22/92	835"C"	C	959	1678	207855
7/23/92	862"C"	C	9260	6175	207912
7/24/92	875"C"	C	4170	3654	207912
7/27/92	876"C"	C	78000	>10000	207941
7/27/92	896"C"	C	1350	1321	207941

C = CALIBRATION XRF INSTRUMENT

Table 2B (Continued)

PHOENIX-GOODYEAR-AIRPORT SUPERFUND SITE
CHROMIUM /CADMIUM RESPONSE PLAN

DATE	SAMPLE LOCATION	SAMPLE TYPE	LAB RESULTS mg/kg Cr	XRF RESULTS mg/kg Cr	ACCESSION #
7/27/92	897"C"	C	43400	3824	207941
7/28/92	908"C"	C	4315	2429	207005
7/29/92	945"C"	C	46850	>10000	207005
7/31/92	1147"C"	C	334	598.9	207060
8/3/92	1056"C"	C	2660	3510	208539
8/4/92	1046"C"	C	737	2111	208539
8-5-92	1173"C"	C	2053	1662	208693
8-6-92	1217"C"	C	484	818	208693
8-12-92	1286"C"	C	2035	2393	208693

November 16, 1992

TABLE 3

LORAL CHROME
STOCK PILE ANALYSIS SUMMARY
HEXAVALENT CHROMIUM CONTAMINATED SOIL

DATE 1992	STOCKPILE	TOTAL CHROMIUM mg/kg	HEXAVALENT CHROMIUM mg/kg	TOTAL CADMIUM mg/kg	DALARE REPORT NO.
10-1	1	2405	355	13.1	1513
10-1	2	2315	920	15.6	1513
10-1	3	4390	290	26.4	1513
10-2	4	4230	91	39.1	1521
10-2	5	4270	83	33.3	1521
10-2	6	3965	120	26.7	1521
10-2	7	3865	104	27.3	1521
10-6	8	2160	112	35.7	1542
10-6	9	1810	81	23.3	1542
10-6	10	1755	46	19.6	1542
N/A	11	N/A	N/A	N/A	N/A
N/A	12	N/A	N/A	N/A	N/A
10-8	13	1805	57	8.9	1551
10-8	14	1310	60	13.3	1551
10-8	15	901	32	12.9	1551
10-13	16	1350	29	13.6	1567
10-13	17	2575	55	20.5	1567
10-13	18	1485	56	22.4	1567
10-13	19	1465	51	25.7	1567
10-13	20	1830	77	30.9	1567
10-13	21	1535	37	19.1	1584
10-13	22	2060	23	20.5	1584
*10-13	23	3095	24	38.4	1584

* TWO SAMPLES WERE TAKEN
N/A = NOT

TABLE 3 (CONTINUED)

November 16, 1992

DATE 1992	STOCKPILE	TOTAL CHROMIUM mg/kg	HEXAVALENT CHROMIUM mg/kg	TOTAL CADMIUM mg/kg	DALARE REPORT NO.
*10-14	23	2400	85	41.2	1587
10-14	24	1950	40	16.2	1587
10-14	25	1740	51	17.6	1587
10-14	26	1995	41	15.9	1587
10-14	27	2260	54	16.6	1587
10-15	28	2380	48	18.9	1598
10-15	29	1870	76	9.7	1598
10-15	30	1715	47	8.1	1598
10-16	31	2095	78	18.3	1612
10-16	32	1885	125	14.2	1612
10-16	33	1850	85	11.4	1612
10-20	34	1870	65	13.9	1625
10-16	35	1685	113	22.9	1612
10-20	36	1585	68	15.0	1625
10-20	37	2400	57	14.8	1625
10-20	38	1270	35	13.3	1625
10-20	39	1860	43	22.5	1625
10-20	40	1925	59	38.5	1625
10-20	41	1415	46	23.5	1625
10-20	42	1925	73	36.0	1625
10-20	43	1840	77	52.3	1625
10-20	44	1635	64	48.8	1625
11-12	51	1710	40	30.5	1753
11-12	52	1415	47	20.6	1753
11-12	53	1285	60	15.7	1753
11-12	54	1345	62	15.9	1753

* TWO SAMPLES WERE TAKEN
N/A = NOT

Table 3 (Continued)

November 16, 1992

DATE 1992	STOCKPILE	TOTAL CHROMIUM mg/kg	HEXAVALENT CHROMIUM mg/kg	TOTAL CADMIUM mg/kg	DALARE REPORT NO.
11-11	55	2950	60	18.9	1755
11-11	56	1380	68	15.6	1755
11-11	57	1490	55	16.8	1755
11-12	58	1375	72	15.2	1763
11-12	59	1380	54	17.7	1763
11-12	60	1725	55	24.7	1763

* TWO SAMPLES WERE TAKEN
N/A = NOT

TABLE 4

PHOENIX-GOODYEAR-AIROPORT CHROMIUM/CADMIUM RESPONSE PLAN

HEXAVALENT CHROMIUM
SAMPLE SUMMARY
9/2/92

SIEVE ANALYSIS				LABORATORY RESULTS	
Sieve Size	% Passing	% Ret.	Vol Est (500cy)	Cr^{+6} mg/kg	Cr mg/kg
1"	100	0	0	NO SAMPLE	NO SAMPLE
3/4"	98	2	10	1.5	322
1/2"	96	2	10	<1.0	24
3/8"	95	1	5	227	2760
1/4"	93	2	10	2.3	7820
No. 4	92	1	5	95	17800
8	90	2	10	206	13500
10	89	1	5	60	1780
16	87	2	10	88	12800
30	83	4	20	106	26500
40	80	3	15	106	22700
50	77	3	15	109	21200
100	69	8	40	87	13100
200	57	12	60	49	10400
<200 remaining			285	131	15200

HEXSAMP.LOR

TABLE 5
LORAL CHROME
STOCKPILE COMPOSITING FOR STABILIZATION

MATERIAL	BLENDING RATIO (WWB) Int/Cont. Soil	INTERMEDIATE SOIL		CONTAMINATED SOIL		CALCULATED Cr^{+6} Concentration (mg/kg)
		Tons	Yards	Tons	Yards	
Stockpile #1	3/1	45.3	36.	15.1	12.	96.2
	4/1	60.4	48.	15.1	12.	79.
Stockpile #2	9/1	136.	108.	15.1	12.	101
	14/1	211.	168.	15.1	12.	70.9
Stockpile #3	3/1	45.3	36.	15.1	12.	80.
	4/1	60.4	48.	15.1	12.	66.
Stockpile #4	1/1.5	10.1	8.	15.1	12.	58.6
	1/2.	7.5	6.	15.1	12.	64.3
Stockpile #5	1/2	7.4	5.9	15.1	12.	58.9
	1/3	5.	4.	15.1	12.	64.8
Stockpile #6	1/1	15.1	12.	15.1	12.	65.
	1/1.5	10.1	8.	15.1	12.	76
Stockpile #7	1/1	15.1	12.	15.1	12.	57.
	1/1.5	10.1	8.	15.1	12.	66.4

WWB - Wet Weight Basis

TABLE 6

HEXAVALENT CHROMIUM STOCKPILES
BLENDING AND STABILIZATION
VOLUME SUMMARY

DATE 1992	Cr^{+6}/CD Stockpiles		Intermediate Soil	Estimated Total Volume Stabilized c.y.
	No.	Estimated Vol. c.y.	Estimated Vol. C.y.	
10/19	1, 2	12	48	60
10/20	3	12	48	60
10/20	4	12	18	30
10/21	5, 13, 14, 15, 16	60	24	84
10/21	22,6,10,36	48	36	84
10/22	20, 23, 24	36		36
10/22	21	12		12
10/22	34, 35, 35, 37	48		48
10/23	38, 39, 41	36	12	48
10/23	9, 11, 12	36	12	48
10/26	46, 48, 49	36	18	54
10/26	29, 30, 31	36	20	56
10/26	44, 47, 50	36	20	56
10/27	2, 28	24	48	72
10/27	44, 8	24	48	72
10/27	7, 40, 42	36	48	84
TOTALS		540	412	952

*Calculated volume of stabilized hexavalent soil is 219.69 c.y.

TABLE 7

STABILIZATION VERIFICATION SAMPLES										
GRID NO.	SAMPLE NO.	SAMPLE TYPE	TCLP LEACHATE mg/l Cr	TCLP LEACHATE mg/l Cd	UCS psi	DATE	EAST	SOUTH	ELEV.	ACCESS. # ATI OR DAL
3	SM-3-1	V	0.20	<0.01	270	9/17/92	1+25	0+10	958.25	1514-DAL
3	SM-3-2	V	0.40	<0.01	269	9/17/92	1+25	0+10	959.3	1514-DAL
3	SM-3-3	V	0.48	0.01	332	9/17/92	1+25	0+10	959.3	1543-DAL
3	SM-3-5	V	0.15	0.016	261	10/27/92	1+25	1+30	960.1	1656-DAL
3	SM-3-4	V	0.48	<0.010	322	11/3/92	1+05	0+26	960.0	1705-DAL
4	SM-4-2	V	0.45	<0.01	356	9/15/92	1+76	0+14	958.3	1477-DAL
4	SM-4-1	V	0.37	<0.01	342	9/15/92	1+76	0+14	958.3	1543-DAL
4	SM-4-4	V	0.81	0.068		11/5/92	1+56	0+26	959.4	1178-B-DAL
4	SM-4-4	V	0.60	0.020	359	11/5/92	1+56	0+26	959.4	1718-B-DAL
7	SM-7-1	V	0.45	0.014	547	11/30/92	0+55	0+55	958.0	1844-A-DAL
7	INT-SM-7-2	V	0.19	0.010	241	11/30/92	0+75	0+75	958.4	1890-DAL
7	SM-7-3	V	0.13	0.012	478	12/1/92	0+80	0+60	958.9	
7	SM-7-4	V	0.24	<0.010	543	12/1/92	0+75	0+80	959.5	
8	SM-8-1	V	0.47	0.01	998	9/14/92	1+48	0+60	958.15	1438-DAL
8	SM-8-2	V	0.23	<0.01	534	9/16/92	1+50	1+00	958.7	1522-DAL
8	SM-8-3	V	0.21	<0.01	291	9/16/92	1+50	0+57	958.25	1543-DAL
8	ASB-SM-8-5	V	0.13	0.011	1428	11/18/92	1+45	0+75	957.5	1793-DAL
8	Cr^{+6}-SM-8-6	V	0.43	0.013	119	11/18/92	1+24	0+96	958.4	1793-DAL
8	SM-8-7	V	0.31	0.023	210	11/18/92	1+25	0+61	959.3	1833-DAL
8	ASB-SM-8-8-1	V	0.43	0.011	559	11/19/92	1+21	0+90	958.0	1833-DAL
8	ASB-SM-8-8-2	V	0.50	0.027	1051	11/21/92	1+00	0+95	957.1	1833-DAL
8	SM-8-9-2		0.12	0.016	779	11/23/92	1+55	1+25	958.9	
8	SM-8-10	V	0.37	0.036	1162	11/30/92	1+30	0+75	959.5	1844-DAL

V = VERIFICATION - SAMPLE EVERY 67 C.Y. OF STABILIZED MATERIAL
ATI = ANAYLITCAL TECHNOLOGIES LABORATORY
DAL = DALARE ASSOCIATES LABORATORY
* = RESAMPLE

Please note stabilzied chormium/cadmium soil was placed only in the grids given above. Corresponding above locations and elevations reference the sample locations.

December 8, 1992

PHOENIX - GOODYEAR - AIRPORT SUPERFUND SITE
CHROMIUM/CADMIUM RESPONSE PLAN

Loral Chrome Job #051290

STABILIZATION VERIFICATION SAMPLES										
GRID NO.	SAMPLE NO.	SAMPLE TYPE	TCLP LEACHATE mg/l Cr	TCLP LEACHATE mg/l Cd	UCS psf	DATE	EAST	SOUTH	ELEV.	ACCESS. # ATI OR DAL
8	SM-8-9	V	0.14	0.017	133	11/23/92	1+25	0+85	959.0	1890-DAL
9	SM-9-1-1	V	0.33	<0.01	780	9/10/92	1+63	0+79	953.5	1438-DAL
9	SM-9-1-2	V	0.77	0.020	149	9/14/92	1+74	0+94	955.5	
9	SM-9-2-1	V	0.18	<0.01	970	9/11/92	1+75	0+79	955.3	1438-DAL
9	SM-9-3-4-1	V	0.28	0.01	544	9/11/92	1+81	0+71	954.2	1514-DAL
9	SM-9-5-1	V	0.18	<0.01	767	9/11/92	1+75	0+79	955.3	1514-DAL
9	SM-9-2-2	V	1.10	<0.01	252	9/14/92	1+77	0+90	958	1514-DAL
9	SM-9-3-2	V	0.31	0.030	110	11/19/92	1+75	0.+75	958.8	1833-DAL
9	SM-9-4-2	V	0.28	0.016	136	11/21/92	1+65	0+75	959.0	1833-DAL
9	SM-9-5-2	V	0.29	0.018	154	11/23/92	1+95	0+85	959.5	1833-DAL
9	SM-9-6	V	0.41	0.031	458	11/30/92	2+00	0+75	959.6	1844-A-DAL
9	INT-SM-9-7	V	0.20	<0.010	490	12/1/92	1+75	0+65	958.6	1890-DAL
10	SM-10-2	V	0.69	<0.01	505	9/15/92	2+09	0+56	958.8	1514-DAL
11	SM-11-2	V	0.34	0.01	509	9/14/92	0+92	1+01	954.8	1514-DAL
12	SM-12-1	V	0.52	<0.010	362	9/14/92	1+32	1+13	955.5	
13	SM-13-1	V	0.65	0.020	373	9/11/92	1+74	1+05	953.9	
13	SM-13-4	V	0.54	0.016	329	10/23/92	1+52	1+49	956.1	1680-DAL
13	SM-13-5	V	0.64	<0.010	357	10/27/92	1+80	1+35	956.9	1656-DAL
13	SM-13-2	V	0.81	0.16		10/26/92	1+71	1+50	955.4	1656-B-DAL
13	SM-13-2*	V	0.42	0.039	273	11/2/92	1+71	1+50	955.4	1718-A-DAL
13	SM-13-3	V	0.49	<0.010	383	11/3/92	1+75	1+25	955.7	1705-DAL
13	ASB-SM-13-7	V	0.35	0.021	479	11/17/92	1+60	1+40	957.3	1833-DAL
13	ASB-SM-13-6	V	0.14	0.011	390	11/18/92	1+75	1+25	957.0	1793-DAL
13	SM-13-8-2	V	0.25	0.015	338	12/2/92	1+75	1+40	958.7	

V = VERIFICATION - SAMPLE EVERY 67 C.Y. OF STABILIZED MATERIAL
ATI = ANAYLITCAL TECHNOLOGIES LABORATORY
DAL = DALARE ASSOCIATES LABORATORY
* = RESAMPLE

Please note stabilzied chormium/cadmium soil was placed only in the grids given above. Coordinate locations and elevations reference the sample locations.

December 8, 1992

Table 7 (Continued)

PHOENIX - GOODYEAR - AIRPORT SUPERFUND SITE
CHROMIUM/CADMIUM RESPONSE PLAN

Loral Chrome Job #051290

STABILIZATION VERIFICATION SAMPLES										
GRID NO.	SAMPLE NO.	SAMPLE TYPE	TCLP LEACHATE mg/l Cr	TCLP LEACHATE mg/l Cd	UCS psf	DATE	EAST	SOUTH	ELEV.	ACCESS. # ATI OR DAL
13	SM-13-8	V	0.19	0.017	441	12/1/92	1+60	1+25	958.8	1890-DAL
13	SM-13-9	V	0.12	0.015	215	12/3/92	1+65	1+35	959.1	
16	SM-16-5	V	0.63	0.010	496	10/20/92	1+40	1+50	955.4	1680-DAL
16	SM-16-4	V	0.53	0.015	239	10/20/92	1+40	1+50	954.9	1680-DAL
16	SM-16-1	V	0.46	0.036	140	11/2/92	1+50	1+50	954.5	1718-A-DAL
16	SM-16-2	V	0.11	0.013	276	10/19/92	1+50	1+50	954.7	
16	SM-16-6	V	0.44	0.015	979	11/30/92	1+25	1+52	956.5	1844-A-DAL
16	INT-SM-16-7	V	0.18	0.017	397	11/30/92	1+45	1+52	957.9	1890-DAL
16	INT-SM-16-8	V	0.11	0.016	456	12/3/92	1+25	1+75	957.5	
	SM-DRYWELL	V	0.54	<0.01	112	9/18/92				1474-DAL
	LC-10	V	0.36	0.023	305	10/22/92	2+20	0+25	959.3	
9	INT-SM 9-8	V	0.19	0.021	317	12/3/92	1+75	0+65	959.0	1890-DAL

V = VERIFICATION - SAMPLE EVERY 67 C.Y. OF STABILIZED MATERIAL
ATI = ANAYLITCAL TECHNOLOGIES LABORATORY
DAL = DALARE ASSOCIATES LABORATORY
* = RESAMPLE

Please note stabilzied chormium/cadmium soil was placed only in the grids given above. Coordinate locations and elevations reference the sample locations.

December 8, 1992

TABLE 8
DRY WELL RESULTS

SAMPLE NO.	SAMPLE TYPE	LAB RESULTS mg/kg		DATE	ACCESSION # ATI OR DAL
		Cr	Cd		
8-4-DW101-V	V	0.2		8/4/92	208539-ATI
8-4-DW102-V	V	1090		8/4/92	208539-ATI
VW-NO1 (DRY WELL)	V	706	0.9	8/5/92	1180-DAL
DW-1-17.3	V	66	2.7	8/11/92	1209-DAL
DW-1-18.7	V	83	2.1	8/11/92	1209-DAL
DW-1-20.25	V	24	1.9	8/11/92	1209-DAL
DW-2-17.25	V	83	3.3	8/11/92	1209-DAL
DW-2-18.75	V	19	0.8	8/11/92	1209-DAL
DW-3-17.25	V	50	3.5	8/11/92	1209-DAL
DW-3-18.75	V	565	2.7	8/11/92	1209-DAL
DW-3-20.3	V	16	1.5	8/11/92	1209-DAL
DW-3-21.7	V	50	1.3	8/11/92	1209-DAL
DW-4-14.13	V	87	3.2	8/11/92	1209-DAL
DW-4-18.75	V	73	1.9	8/11/92	1209-DAL
DW-4-20.25	V	22	1.5	8/11/92	1209-DAL
DW-5-17.0	V	90	2.9	8/11/92	1209-DAL
DW-5-19.0	V	56	1.2	8/11/92	1209-DAL
DW-5-20.2	V	32	1.6	8/11/92	1209-DAL
DW-6-16.75	V	7.1	1.4	8/11/92	1209-DAL
DW-6-18.25	V	8.0	0.8	8/11/92	1209-DAL
DW-6-19.75	V	12.0	0.5	8/11/92	1209-DAL
DW-7-16.75	V	16.3	1.0	8/11/92	1209-DAL
DW-7-18.25	V	10.2	0.5	8/11/92	1209-DAL
DW-7-19.75	V	10.4	0.8	8/11/92	1209-DAL
DW-8-16.75	V	15.5	0.7	8/11/92	1209-DAL

V = VERIFICATION

ATI = ANAYLITCAL TECHNOLOGIES
DAL = DALARE ASSOCIATES

Table 8 (Continued)

PHOENIX - GOODYEAR - AIRPORT SUPERFUND SITE
CHROMIUM/CADMIUM RESPONSE PLAN

Local Chrome Job #051290

SAMPLE NO.	SAMPLE TYPE	LAB RESULTS mg/kg		DATE	ACCESSION # ATI OR DAL
		Cr	Cd		
DW-8-18.25	V	12.9	0.9	8/11/92	1209-DAL
DW-8-19.75	V	8.3	0.8	8/11/92	1209-DAL
DW-8-21.25	V	15.9	1.1	8/11/92	1209-DAL
DW-9-16.75	V	14.3	0.5	8/11/92	1209-DAL
DW-9-18.25	V	13.8	0.8	8/11/92	1209-DAL
DW-9-19.75	V	6.1	<0.5	8/11/92	1209-DAL
DW-5-22.00	V	VOC SAMPLES		8/12/92	208694-ATI
		Non Detected			
DW-5-32.40	V	Non Detected		8/12/92	208694-ATI
DW-6 GAS SAMPLES		Seperate		8/12/92	5081405-AIR TOXICS

V = VERIFICATION

ATI = ANAYLITCAL TECHNOLOGIES
DAL = DALARE ASSOCIATES

TABLE 9A

LORAL CHROME
SAMPLE ANALYSIS SUMMARY

DESCRIPTION	Cr	HEXAVLENT Cr	CADMIUM	ASBESTOS
Rubble Pile	1310	133	9.7	Neg.
Re-Screen Material	2215	1688	21.2	Boderline ≤ 1% Chrysotile
Asb. - Shake Material	1090	34	21.5	2-5% Chrysotile
Asb. - Shake Material	1125	29	21.8	" "
Asb - Shake Material	1420	26	23.6	" "
LC-10	673	662	<0.5	Neg.
LC-10	299	280	<0.5	Neg.
Asbestos Re-screen #1	1505	52	29.1	Neg.
Asbestos Re-screen #2	1640	54	31.5	Neg.
Asbestos Re-screen #3	2365	74	43.0	Neg.
Asbestos Re-screen #4	2270	64	42.3	Neg.

Neg. = Negative
Asb. = Asbestos

Note:

Cr, Hex-Cr, Cd given in mg/kg
Asbestos - % by sample volume

November 16, 1992
Loral Chrome Job #051290

TABLE 9B

LORAL CHROME
ASBESTOS STOCKPILE SAMPLE ANALYSIS SUMMARY

DATE 1992	ASBESTOS STOCKPILE No.	ASBESTOS (FIBERQUANT) Units	TOTAL CHROMIUM mg/kg	HEXAVALENT CHROMIUM mg/kg	TOTAL CADMIUM mg/kg	DALARE REPORT NO.
10-29	1	NEG	421	10.6	7.7	1679
10-29	2	NEG	2035	62	48.8	1679
10-29	3	NEG	2355	76	68.7	1679
11-2	4	NEG	1230	20	7.5	1695
11-2	5	NEG	2455	23	12.2	1695
11-2	6	NEG	1210	36	24.3	1695
11-2	7	NEG	790	28	11.4	1695
11-2	8	NEG	1865	19	9.6	1695
11-2	9	NEG	3905	115	106	1695
11-2	10	NEG	1430	32	6.2	1695
11-2	11	NEG	1090	52	6.2	1695
11-2	12	NEG	775	44	9.0	1695
11-2	13	NEG	1085	66	11.5	1695

* TWO SAMPLES WERE TAKEN
Note: Cr^{+6}, Hex-Cr, Cd given in mg/kg
Asbestos - % by volume

Table 9B (Continued)

November 16, 1992
Loral Chrome Job #051290

DATE 1992	ASBESTOS STOCKPILE No.	ASBESTOS (FIBERQUANT) Units	TOTAL CHROMIUM mg/kg	HEXAVALENT CHROMIUM mg/kg	TOTAL CADMIUM mg/kg	DALARE REPORT NO.
11-3	14	NEG	679	73	2.6	1704
11-3	15	NEG	668	68	4.4	1704
11-3	16	NEG	1970	48	12.3	1704
11-3	17	NEG	1105	82	49.4	1704
11-3	18	NEG	1860	66	80.6	1704
11-3	19	NEG	3235	75	68.5	1704
11-4	20	NEG	6445	450	205	1712
11-4	21	NEG	7360	208	223	1712
11-5	22	NEG	6700	245	297	1717
11-5	23	NEG	5455	220	190	1717
11-5	24	NEG	5980	207	192	1717
11-5	25	NEG	6840	297	210	1717
11-5	26	NEG	5010	230	160	1717
11-5	27	NEG	6840	263	179	1717
11-9	28	NEG	3735	89	98.1	1746
11-9	29	NEG	8540	169	169	1746

* TWO SAMPLES WERE TAKEN
Note: Cr^{+6}, Hex-Cr, Cd given in mg/kg
Asbestos - % by volume

Table 9B (Continued)

November 16, 1992
Loral Chrome Job #051290

DATE 1992	ASBESTOS STOCKPILE No.	ASBESTOS (FIBERQUANT) Units	TOTAL CHROMIUM mg/kg	HEXAVALENT CHROMIUM mg/kg	TOTAL CADMIUM mg/kg	DALARE REPORT NO.
11-9	30	NEG	7515	165	169	1746
11-9	31	NEG	5330	89	103	1746
11-9	32	NEG	3105	47	40.7	1746
11-9	33	NEG	1750	29	46.9	1746
11-9	34	NEG	2160	40	39.2	1747
11-9	35	NEG	2415	40	50.1	1747
11-9	36	NEG	1295	26	23.6	1747
11-9	37	NEG	2450	21	73.7	1747
11-9	38	NEG	975	26	15.3	1747
11-9	39	NEG	1310	22	25.3	1747
11-9	40	*≤ OR TO 1%	795	19	14.8	1747
11-9	41	NEG	695	15	12.1	1747
11-9	42	NEG	905	19	14.9	1747
11-9	43	NEG	345	14	11.4	1747
11-10	44	NEG	575	23	14.3	1753
11-10	45	NEG	365	18	6.5	1753

* TWO SAMPLES WERE TAKEN
Note: Cr^{+6}, Hex-Cr, Cd given in mg/kg
Asbestos - % by volume

TABLE 10

OFF - SITE CONTAMINATED SOIL SUMMARY

DISPOSAL SITE: ENVIROSAFE SERVICES OF IDAHO, INC.
10.5 MILES N. WAY HWY 78
MISSLE BASE ROAD
GRANDVIEW, IDAHO 83625

CONTAMINATE LEVELS (MG/KG)			
Cr^{+6} Stock Pile No.	Cr	Cr^{+6}	Cd
20	6445	450	205
21	7360	205	223
22	6700	245	297
23	5455	220	190
24	5980	207	192
25	6840	297	210
26	5010	230	160
27	6840	263	179
28	3735	89	98.1
29	8940	169	169
30	7515	165	169
31	5330	89	103
32	3107	47	40.7
33	1750	29	46.9
34	2160	40	39.2
35	2415	40	50.1
36	1295	26	23.6
37	2450	21	73.7
38	975	26	15.3
39	1310	22	25.3
40	795	19	14.8
41	695	15	12.1

CONTAMINATE LEVELS (MG/KG)			
Cr^{+6} Stock Pile No.	Cr	Cr^{+6}	Cd
42	905	19	14.9
43	345	14	11.4
44	575	23	14.3
45	365	18	6.5
51	1710	40	30.5
52	1415	47	20.6
53	1285	60	15.7
54	1345	62	15.9
55	2950	60	18.9
56	1380	68	15.6
57	1490	55	16.8
Rubble (Rocks)	1310	133	9.7
Cr Shaker Pile I&II	1420	34	23
LC-10-1	673	662	<.5
LC-10-2	735	671	1.2
Intermediate	178	3&5	2.4 & 2.9
Re-Screen Cr^{+6} Mat	2215	1688	21.2
Total Cubic Yards = 387.1 c.y.			

TABLE 11

MANIFEST LEDGER
OFF-SITE CONTAMINATED SOIL DISPOSAL SITE, ENVIROSAFE, BOISE IDAHO

MANIFEST NO.	DATE PICKED-UP	APPROX. CUBIC YARDS
10876	2/2/93	16.2
10910	2/2/93	16.8
10837	2/2/93	16.8
10854	2/5/93	17.0
10942	2/5/93	16.8
10836	2/5/93	17.0
10875	2/5/93	16.0
10811	2/5/93	16.7
10805	2/5/93	16.8
10802	1/25/93	17.5
10850	1/25/93	17.0
10906	1/25/93	17.0
10970	1/25/93	17.0
10969	1/25/93	17.2
10966	1/25/93	16.8
10002 (Rubble)	1/5/93	17.0*
10920	1/5/93	17.0
10001 (Rubble)	1/5/93	17.0*
10965	2/13/93	17.0
10882	2/13/93	17.0
10846	2/13/93	15.8
10855	2/13/93	16.8
10963	2/13/93	16.9
Total Approximate Yardage 387.11		

*Estimated at 17 cubic yards

MAPS

1 - Original Ground Elevations and Contours

2 - Excavation Contours with Original Contours

3 - Stabilized Contours of Finished Site

PARTIALLY SCANNED
OVERSIZE ITEM(S)

See Document # 2064250
for partially scanned image(s).

For complete version of oversize document(s),
see paper copy.

Partial OVD parent

INSPECTION PLAN

This inspection plan has been prepared as required by the Consent Decree, Section VII, 2e.

A. Monthly Physical Site Inspection

1. A physical inspection of the site shall be conducted at least once per month and after every major rain event (1/2" or larger rainfall).
2. During the monthly inspection the following items shall be noted and recorded:
   a. Damage to the site cover or gravel caused by erosion.
   b. Damage noted to any stabilized material.
   c. Vehicular traffic over site.
   d. Excavations on site or near site.
   e. Vandalism at site.
3. A video tape of the site will be made with date and time recorded.

4. Repairs will be made to any area showing excessive erosion* to restore the cover or gravel to original conditions.

B. Quarterly Site Elevations Measurements

1. Using the control steel stakes set at each site grid point** (see Site Grid Plan - Figure 3) establish elevations for the top of each grid stake and top of stabilized material at each grid stake. Note any difference caused by erosion or settlement.

2. This procedure can be reduced to **semi-annual measurements for the second year** of records without noticeable erosion **and annually thereafter.**

C. Semi-Annual Groundwater Sampling

1. In conjunction with the groundwater monitoring of Sub-Unit A wells, samples and water levels will be taken semi-annually from the following wells:

EMW-4 EMW-3 EMW-6 16GP-1

***Excessive erosion is defined as erosion to a degree that the cover material has been sufficiently removed by drainage waters to cause a potential erosion or displacement or leaching of the stabilized soil containing the chromium and cadmium contamination to a degree that degradation of groundwater may be effected.**

**** Intersection of grid lines.**

2. The water Samples will be examined for Cr and Cd (EPA Method 213.2 and 200.7) and VOC (EPA Method 8010).

Samples from the on-site lake were taken during the remedial activities for reference and our given in Appendix 17 of the Final Report.

D. Reporting Procedure

1. Quarterly reports shall be submitted to **Environmental Protection Agency (EPA) and Arizona Department of Environmental Quality (ADEQ).**

EPA	ADEQ
Craig Cooper, Project Manager 75 Hawthorne St. San Francisco, CA 94105	Byron James, Project Manager 3033 N. Central Phoenix, AZ

2. Each report shall give the results of the inspections conducted during the quarter and mitigating responses complete to correct any deficiencies.

3. Should the site be damaged by **surface** erosion or excavation **to a degree that the integrity of the stabilized material is effected, EPA and ADEQ will be notified within 48 hours.**

APPENDICES

1 - Excavation Sample Laboratory Results

2 - Calculations of Excavated Soil Volume

3 - XRF Laboratory Results

4 - Hexavalent Chrome Stockpile Laboratory Analysis

5 - Sieve Analysis

6 - Blending Ratios Laboratory Results

7 - Stabilized Soil TCLP Laboratory Results

Stabilized Compression Test Results

8 - Cover Material Compaction Tests

9 - Cover Material Laboratory Analyses

10 - Amendments to IWP (1,2,3, & 4)

11 - Manifests for Hexavalent Chrome - EnviroSafe

12 - Manifest for Asbestos Waste - Butterfield Stage

13 - High Hexavalent Chrome

14 - Laboratory Results for Dry Well Tests

15 - Asbestos Sample Laboratory Data and trash samples

16 - Air Monitoring Data

17 - Pond Water Laboratory Analysis

18 - EPA Letters

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

September 24, 1992

Mr. Ed Waltz
Goodyear Tire and Rubber Company
1144 East Market Street
Akron, Ohio 44316

RE: Phoenix-Goodyear Airport Area Superfund Site (south)
Chromium Sludge Bed Action - EPA Consent Order No. 92-05
Amendment No. 3 to the Implementation Plan:
Hexavalent Chromium Response Plan

Dear Mr. Waltz:

EPA has reviewed and hereby approves (with comments provided below) Amendment No. 3 to the Chromium-Cadmium Response Action Integrated Work Plan. Amendment No. 3, also known as the Hexavalent Chromium Response Plan, is dated September 21, 1992, and was faxed to me by Bartholomew Engineering on behalf of Goodyear Tire.

Incorporating the comments given below, Goodyear Tire may immediately proceed with the implementation of Amendment No. 3. For oversight purposes, please inform Byron James of ADEQ at (602) 207-4191 with the day and time Goodyear Tire intends to commence with Amendment No. 3 activities. Larry Smith and I will be on-site off and on during the week of September 28.

Comments on Hexavalent Chromium Response Plan

1. As a point of clarification, the TCLP requirements for chromium of 5.2 ppm and cadmium of 0.066 ppm are requirements are mandated by RCRA and should not be referred to as ADEQ's HBGLs.

2. Comment number five of my September 21, 1992 letter to you is hereby revised to the following:

a) Level C personal protection as described in the Integrated Work Plan shall be used by on-site workers while in the exclusion zone throughout the implementation of Amendment No. 3.

b) Both continuous and time-weighted average dust monitors are used by on-site workers as required by OSHA while in the exclusion zone.

c) A total of five PDM3 real time aerosol monitoring stations are installed at the permanent cyclone fence surrounding the site or at a maximum distance of 200 feet, which ever is less, from the perimeter of the exclusion zone. Of the these five perimeter air monitoring stations, two stations shall be located downwind of the exclusion zone while the other three shall be located in remaining three directions.

d) All dust monitors are checked and the results logged every 30 minutes during the first eight hours of segregation activity and no more than every 60 minutes thereafter.

e) The dust threshold value may remain at 0.5 mg per cubic meter since this value is based on a hexavalent chromium risk analysis scenario.

f) Segregation activities shall cease operations immediately upon the identification of a dust level exceeding the dust threshold value or the Maricopa County Health Department air standard for particulants at any of the five perimeter air monitoring stations.

g) Copies of all air monitoring logs prepared during the entire response action including Amendment 3 shall be sent to EPA as part the Final Report required by the Consent Order.

h) VFL shall revise their Health and Safety Plan in accordance with the above comments and resubmit it for EPA review.

On another but related subject, it was not until well after signature of Consent Order 92-05, did Goodyear Tire inform EPA that the stabilized material would be placed in monolith-type lifts. As a result, the performance standard for particle size as described by Section VII.2.f.i.C. of Order 92-05 is no longer relevant. Therefore, pursuant to Section XXV of Consent Order 92-05 and as we discussed by telephone conversation on September 22 and as agreed to by Goodyear Tire's contractor Joe Fabrizio of VFL Technology Corporation on September 23, Section VII.2.f.i.C. is hereby replaced by the following paragraph:

"(C) after a 28-day cure period, the stabilized soil shall, at a minimum, meet 100 psi compressive strength as tested by method ASTM C39."

Call me with any questions at (415) 744-2370.

Sincerely,

Craig Cooper

Craig Cooper
Remedial Project Manager

cc: Dick Bartholomew, Bartholomew Engineering
Larry Smith, URS Consultants Inc.; Byron James, ADEQ

UNITE STATES ENVIRONMEI
REGIC
75 Hawtho
San Francisco,

FAX TR NSMITTAL | # of pages ▶ 3

To DICK BARTHOLOMEW	From CRAIG COOPER
Dept./Agency	Phone # 415 744-2370
Fax # 602 956-3690	Fax # 415 744-1917

NSN 7540-01-317-7368 5099-101 GENERAL SERVICES ADMINISTRATION

December 3, 1992

Mr. Ed Waltz
Goodyear Tire and Rubber Company
1144 East Market Street
Akron, Ohio 44316

RE: Phoenix-Goodyear Airport Area Superfund Site (south)
Chromium Sludge Bed Action - EPA Consent Order No. 92-05
Miscellaneous Issues

Dear Mr. Waltz:

This letter is in response to three letters dated November 10, November 11, and November 23 and one memorandum dated November 30, all from Goodyear Tire's consultant, Mr. Dick Bartholomew. These transmittals concern various issues regarding the above-referenced project. EPA's response to each transmittals is provided below.

Dry Well Closure

Mr. Bartholomew's letter of November 11, 1992, requested EPA approval to fill and close an 12 inch access pipe to the dry well discovered during the course of this project. EPA approved Goodyear Tire's request to install the access pipe by letter dated September 11, 1992. On November 10, 1992, EPA verbally informed Goodyear Tire that the access pipe may be filled with stabilized material since metal and volatile organic compound (VOC) contaminant data underneath the dry well obtained pursuant to Amendment #2 to the Implementation Plan and subsequent Goodyear Tire and EPA modeling of such data indicated that an immediate response action was not warranted. However, final EPA determination regarding the need for a soil vapor extraction (SVE) remedy for polygon 69 in which the dry well is located will be made pursuant to EPA review of Goodyear Tire's SVE work deliverables required under the 1991 Final Remedy Consent Decree for PGA-south.

Preliminary Cadmium TCLP Exceedances

Mr. Bartholomew's November 10 letter constituted the October 1992 Monthly Report for the subject project. Attached to this letter are laboratory reports indicating TCLP Cadmium data results for stabilized material samples SM-21-13, SM-13-2, and SM-16-1 above the 0.066ppm Cd threshold level required for this project. Goodyear Tire informed EPA that samples from the same lifts as the

problems samples were sent for laboratory analysis and resulting cadmium TCLP levels were acceptable.

Furthermore, on November 20, 1992 EPA informed Goodyear Tire that its sample (taken by a representative of ADEQ) of lift SM-3/2 exceeded the Cadmium TCLP threshold. EPA subsequently reanalyzed a soil sample from the same lift and today learned that cadmium TCLP levels were not exceeded. Therefore, EPA can now report that all samples of stabilized material obtained under the EPA/ADEQ Sampling Plan analyzed for Chromium and Cadmium TCLP tests achieved acceptable results. The reason for improved TCLP results concerning the problem lifts may be attributed to additional cure time the second confirmatory samples under went. OK

It is EPA understanding that all stabilization activities will be completed on December 4. Therefore, prior to placement of any cover materials, Goodyear Tire must confirm to EPA in writing that all of the lifts of stabilized material placed at the site satisfied the chromium and cadmium TCLP and compressive strength requirements pursuant to the above-referenced consent order. OK

Off-site Disposal of Site Wastes

Mr. Bartholomew's November 23 letter requested EPA approval for the management site wastes in accordance with Amendments 3 and 4 to the Implementation Plan. As identified and proposed by Goodyear Tire in accordance with Implementation Plan Amendment #3, EPA accepts the transfer of 250-300 cubic yards of high level hexavalent chromium and high level cadmium waste to Envirosafe Services landfill in Idaho. As identified and proposed by Goodyear Tire in accordance with Implementation Plan Amendment #4, EPA accepts the transfer of 60 cubic yards of asbestos waste to the Butterfield Landfill in Arizona.

Modification to the Cover

Mr. Bartholomew's November 30, 1992, memorandum requested EPA approval to significantly reduce the scope of the design of the cover for the stabilized material. This request is hereby disapproved. Goodyear shall install a cover as required under the consent order. The cover modification request is denied because the cover's purpose encompasses more than just creation of a mound with less than 3% outward grade. A properly constructed cover, consisting of a minimum of 6 inches of compacted, tested and clean native soil plus a minimum of 3 inches of gravel with a diameter greater than 0.75 inches, will constitute a needed barrier to reduce potential exposures via ingestion, dermal contact, and inhalation of stabilized material. The cover also enhances the overall compressive strength of the site and will facilitate rain drainage and thereby reducing that amount of moisture that comes in contact with the stabilized material.

OPTIONAL FORM 99 (7-90) FAX TRANSMITTAL # of pages ▶ 3

To DICK BARTHOLOMEW	From CRAIG COOPER
Dept./Agency	Phone # 415 744-2370
Fax # 602-956-3690	Fax # 415 744-1917

If your have any questions regarding this letter, please call me at (415) 744-2370.

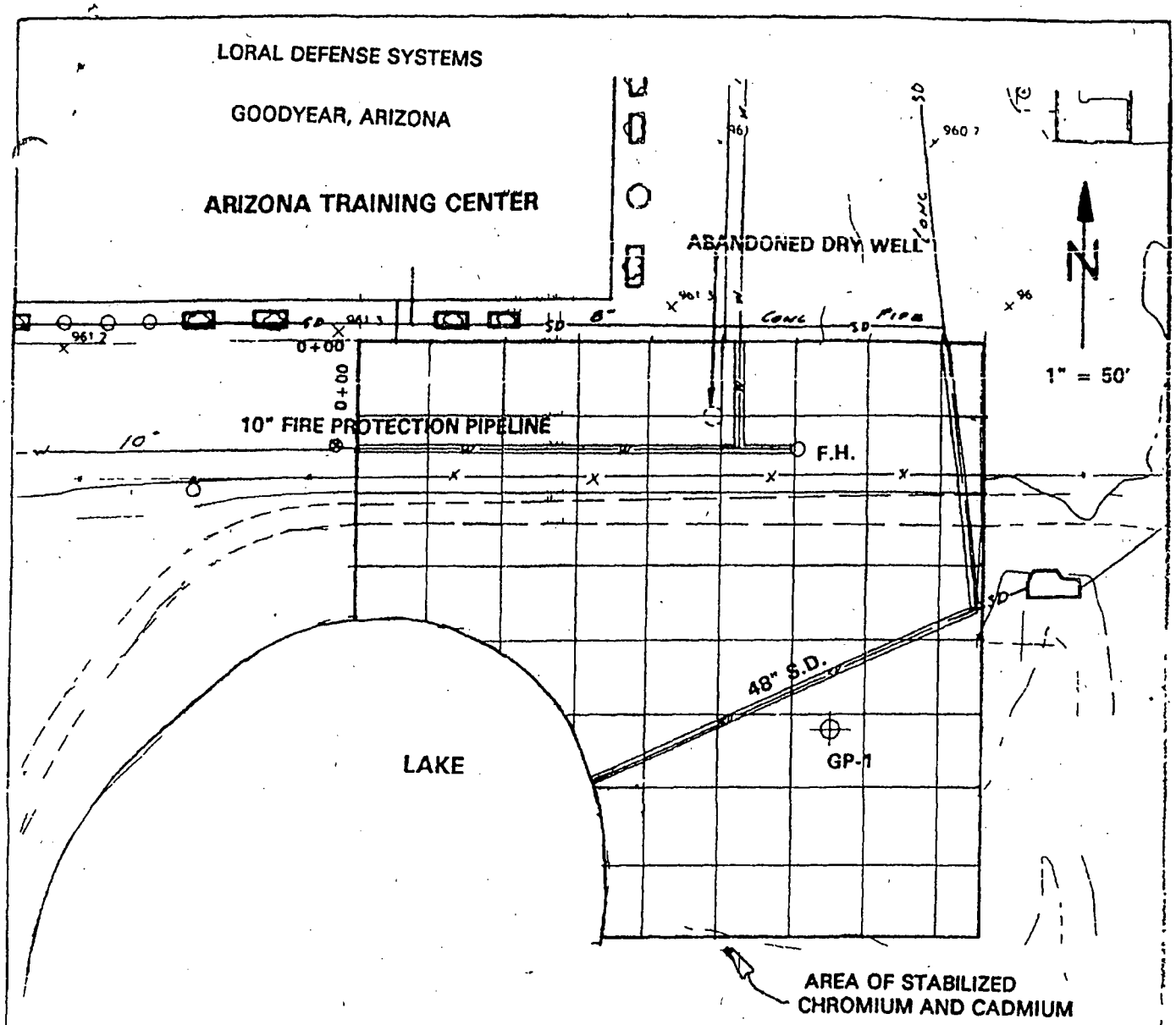
Sincerely,

Craig Cooper

Craig Cooper
Remedial Project Manger

cc: Dick Bartholomew, Bartholomew Engineering
Byron James, ADEQ
Larry Smith, URS Consultants Inc.

EXHIBIT A



PHOENIX-GOODYEAR AIRPORT
SUPERFUND SITE
CHROMIUM-CADMIUM
RESPONSE ACTION
FINAL REPORT
INSPECTION REPORT
MARCH 31,1993

BARTHOLOMEW ENGINEERING, INC.
4120 North 20th Street Suite F
PHOENIX, ARIZONA 85016
(602) 957-0208

EXHIBIT A

NOTICE TO DEED

EXHIBIT 7
TO DEUR APPLICATION FOR FORMER CHROME SLUDGE BEDS AT PHOENIX GOODYEAR AIRPORT

PHOENIX-GOODYEAR AIRPORT SOUTH SUPERFUND SITE
FORMER CHROME DRYING BED

INSPECTION AND MAINTENANCE PLAN

This inspection and maintenance plan has been prepared as required by the Consent Decree, Section VII, 2e. and includes modifications to the scope and schedule for former chrome drying bed inspections and reporting.

A. Annual Physical Site Inspection

1. A physical inspection of the site shall be conducted at least once per year.
2. During the annual inspection, the following items shall be noted and recorded using the attached inspection form.
    a. Damage to the site cover or gravel caused by erosion.*
    b. Damage noted to any stabilized material.
    c. Vehicular traffic over site.
    d. Excavation on site or near site.
    e. Vandalism at the site.
3. Photographs of the cover will be taken during each inspection and included in the summary report.

B. Groundwater sampling

1. In conjunction with the groundwater monitoring of Subunit A wells, water levels will be measured and samples collected from:
    a. Well GP-09 for chromium on a semi-annual basis.
    b. Well GP-01 for VOC's on an annual basis.
    c. Samples will be analyzed for chromium by EPA Method 213.2 and for VOCs by EPA Method 8260.
    d. Laboratory results from the sample collected semi-annually from well GP-09 will be reported in the semi-annual monitoring report immediately following collection.
    e. Laboratory results from the samples collected from both wells will be included in the subsequent annual monitoring report.

C. Reporting Procedures

1. Annual inspections will be included as an appendix to the Semi-Annual (Annual) Monitoring report submitted following the inspection. The reports shall be submitted to the U.S. Environmental Protection Agency (USEPA) and Arizona Department of Environmental Quality (ADEQ).

USEPA	ADEQ
Catherine Brown	Andre Chiaradia
Remedial Project Manager	Remedial Project Manager
75 Hawthorne Street	1110 West Washington Street
San Francisco, CA 94105	Phoenix, AZ 85007

2. Each inspection report shall give the results of the annual inspection and any mitigating response actions or maintenance activities necessary to correct any deficiencies.

3. Should the site be damaged by surface erosion or excavation to a degree that the integrity of the stabilized material is affected, EPA and ADEQ will be notified within 48 hours.

***Excessive erosion is defined as erosion to a degree that the cover material has been sufficiently removed by drainage waters to cause a potential erosion or displacement or leaching of the stabilized soil containing the chromium and cadmium contamination to a degree that degradation of groundwater may result.**

Attachment: Inspection Form for the Former Chrome Drying Bed Cover at the JRC Goodyear Facility, Phoenix-Goodyear Airport South Superfund Site, Goodyear, Arizona

EXHIBIT 8
TO DEUR APPLICATION FOR FORMER CHROME SLUDGE BEDS AT PHOENIX GOODYEAR AIRPORT

The Goodyear Tire & Rubber Company
Akron, Ohio 44316 - 0001

Vice President & Treasurer

March 18, 2011

Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, Arizona 85007
Attn. Mr. Hal Hong, Financial Administrator

Re: Financial Assurance in Connection With DEUR Application
With Respect to the Former Chrome Sludge Beds at the
Phoenix Goodyear Airport (South) Site

Dear Mr. Hong:

The Goodyear Tire & Rubber Company ("Goodyear") has, without any admission as to liability for any purpose, been remediating the Phoenix Goodyear Airport (South) Site for several years under the oversight of the U.S. Environmental Protection Agency and the Arizona Department of Environmental Quality ("ADEQ"). Former chrome sludge beds at the Phoenix Goodyear Airport (South) Site were solidified and capped in 1993 pursuant to a Consent Order with the U.S. Environmental Protection Agency. An Engineering Control Plan document in connection therewith is dated March 31, 1993 (Revised July 20, 1993). Said Consent Order provides, among other things, that Goodyear does not admit any liability or admit any issues of law or fact or any responsibility for the alleged release or threatened release of any hazardous substances into the environment.

The engineering control is specified in the Engineering Control Plan document dated March 31, 1993 (Revised July 20, 1993) and consists of the following:

> Solidification of the contents of the former Chrome Drying Beds in order to immobilize the contaminants with 6" of clean compacted soil on top, followed by 3" of gravel on top of compacted soils, surrounded by a berm to limit vehicle access to stabilized area.

JRC Goodyear, LLC, an Arizona Limited Liability Company unrelated to The Goodyear Tire & Rubber Company, is the current owner of the real property on which the former chrome sludge beds are located. JRC Goodyear, LLC is submitting a Declaration of Environmental Use Restriction (DEUR) with respect to the former chrome sludge beds imposing restrictions in the deed concerning future development of that area unless or until additional remediation is undertaken. As part of that submission, JRC Goodyear, LLC will also submit an Inspection and Maintenance Plan relating to the engineering

control. JRC Goodyear, LLC, as the owner of the property, will be obligated under the DEUR to perform the Inspection and Maintenance Plan requirements for the engineering control for the former chrome sludge beds for a period of thirteen (13) years. Since the cap on the chrome sludge beds was constructed in 1993, the future Inspection and Maintenance Plan will cover a period of thirteen (13) years.

Attachment A is a cost analysis of the Inspection and Maintenance Plan in current dollars showing total projected costs for thirteen (13) years of $54,470 with a net present value of $46,019 assuming a 2.5% discount rate. *Attachment B* is a copy of the Inspection and Maintenance Plan relating to the former chromium sludge drying beds.

Goodyear, without any admission as to liability for any purpose and without admission of any issues of law or fact or any responsibility for the alleged release or threatened release of any hazardous substances into the environment, will provide financial assurance for the performance of the Inspection and Maintenance Plan relating to the engineering control for the former chrome sludge beds under the Engineering Control Plan document dated March 31, 1993 (Revised July 20, 1993).

Attachment C is a copy of Goodyear's Form 10K Annual Report for the fiscal year ended December 31, 2010. Goodyear's Consolidated Balance Sheet at December 31, 2010, appears on page 63 of said 2010 Annual Report. As indicated in said Consolidated Balance Sheet, at December 31, 2010, Goodyear had Net Working Capital (Total Current Assets less Total Current Liabilities) of $2,738,000,000 and Cash and Cash Equivalents of $2,005,000,000.

Goodyear is financially capable of meeting the requirements of AR.S. 49-152.01 with respect to the Inspection and Maintenance Plan for the former chrome sludge beds under the Engineering Control Plan document dated March 31, 1993 (Revised July 20, 1993).

A.R.S. § 49-152.01(B)(1) provides that financial assurance for maintenance of the engineering control may include:

> "(i) Any other financial assurance mechanisms or combination of mechanisms as approved by the director."

Goodyear respectfully requests that ADEQ allow the Owner, through Goodyear, to demonstrate the ability to perform the Inspection and Maintenance Plan for the engineering control by periodically providing financial information to allow ADEQ to determine that Goodyear has sufficient assets to perform the Inspection and Maintenance Plan for the engineering control.

Goodyear respectfully proposes an alternative form of financial assurance consisting of the periodic submission by Goodyear to ADEQ of financial information demonstrating that Goodyear has sufficient assets to perform the Inspection and Maintenance Plan for the engineering control. Specifically, Goodyear proposes submitting financial information to ADEQ on an annual basis within 120 days of the close of Goodyear's

fiscal year. Goodyear would submit such information in the form of copies of annual or other reports to the U.S. Securities and Exchange Commission or to the shareholders, as the case may be, containing information concerning Goodyear's Net Working Capital (Total Current Assets less Total Current Liabilities) and Cash and Cash Equivalents. If ADEQ, based on its review of the financial information submitted, determines that a different form of financial assurance is required, Goodyear would, within thirty (30) days after receipt of ADEQ's notice of determination, obtain and provide to ADEQ one of the other forms of financial assurance listed in A.R.S. § 49-152-.01.

We, therefore, respectfully request that ADEQ approve the foregoing proposed alternative form of financial assurance pursuant to A.R.S. 49-152.01(B)(1)(i).

Very truly yours,

Scott A Honnold
Vice President & Treasurer

SUMMARY OF PROJECTED COSTS FOR ANNUAL INSPECTIONS & MAINTENANCE
Former Chromium Drying Beds
Phoenix Goodyear Airport South (PGAS) Superfund Site
Goodyear, AZ

TOTALS	
Total for Year 1	$4,190
Total for Year 2	$4,190
Total for Year 3	$4,190
Total for Year 4	$4,190
Total for Year 5	$4,190
Total for Year 6	$4,190
Total for Year 7	$4,190
Total for Year 8	$4,190
Total for Year 9	$4,190
Total for Year 10	$4,190
Total for Year 11	$4,190
Total for Year 12	$4,190
Total for Year 13	$4,190
Total for 13 Years:	$54,470
NPV (assuming 2.5%):	$46,019

ATTACHMENT A

PHOENIX-GOODYEAR AIRPORT SOUTH SUPERFUND SITE
FORMER CHROME DRYING BED

INSPECTION AND MAINTENANCE PLAN

This inspection and maintenance plan has been prepared as required by the Consent Decree, Section VII, 2e. and includes modifications to the scope and schedule for former chrome drying bed inspections and reporting.

A. Annual Physical Site Inspection

1. A physical inspection of the site shall be conducted at least once per year.
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    d. Excavation on site or near site.
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3. Photographs of the cover will be taken during each inspection and included in the summary report.

B. Groundwater sampling

1. In conjunction with the groundwater monitoring of Subunit A wells, water levels will be measured and samples collected from:
    a. Well GP-09 for chromium on a semi-annual basis.
    b. Well GP-01 for VOC's on an annual basis.
    c. Samples will be analyzed for chromium by EPA Method 213.2 and for VOCs by EPA Method 8260.
    d. Laboratory results from the sample collected semi-annually from well GP-09 will be reported in the semi-annual monitoring report immediately following collection.
    e. Laboratory results from the samples collected from both wells will be included in the subsequent annual monitoring report.

C. Reporting Procedures

1. Annual inspections will be included as an appendix to the Semi-Annual (Annual) Monitoring report submitted following the inspection. The reports shall be submitted to the U.S. Environmental Protection Agency (USEPA) and Arizona Department of Environmental Quality (ADEQ).

USEPA	ADEQ
Catherine Brown	Andre Chiaradia
Remedial Project Manager	Remedial Project Manager
75 Hawthorne Street	1110 West Washington Street
San Francisco, CA 94105	Phoenix, AZ 85007

2. Each inspection report shall give the results of the annual inspection and any mitigating response actions or maintenance activities necessary to correct any deficiencies.

3. Should the site be damaged by surface erosion or excavation to a degree that the integrity of the stabilized material is affected, EPA and ADEQ will be notified within 48 hours.

***Excessive erosion is defined as erosion to a degree that the cover material has been sufficiently removed by drainage waters to cause a potential erosion or displacement or leaching of the stabilized soil containing the chromium and cadmium contamination to a degree that degradation of groundwater may result.**

Attachment: Inspection Form for the Former Chrome Drying Bed Cover at the JRC Goodyear Facility, Phoenix-Goodyear Airport South Superfund Site, Goodyear, Arizona

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2010

Commission File Number: 1-1927

THE GOODYEAR TIRE & RUBBER COMPANY

(Exact name of registrant as specified in its charter)

Ohio	34-0253240
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1144 East Market Street, Akron, Ohio	44316-0001
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (330) 796-2121

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, Without Par Value	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☑ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes ☑ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☑

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☑ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes ☐ No ☑

The aggregate market value of the common stock held by nonaffiliates of the registrant, computed by reference to the last sales price of such common stock as of the closing of trading on June 30, 2010, was approximately $2.4 billion.

Shares of Common Stock, Without Par Value, outstanding at January 31, 2011:

242,976,369

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the Company's Proxy Statement for the Annual Meeting of Shareholders to be held on April 12, 2011 are incorporated by reference in Part III.

THE GOODYEAR TIRE & RUBBER COMPANY

Annual Report on Form 10-K

For the Fiscal Year Ended December 31, 2010

Table of Contents

PART I.

ITEM 1. BUSINESS.

BUSINESS OF GOODYEAR

The Goodyear Tire & Rubber Company (the "Company") is an Ohio corporation organized in 1898. Its principal offices are located at 1144 East Market Street, Akron, Ohio 44316-0001. Its telephone number is (330) 796-2121. The terms "Goodyear", "Company" and "we", "us" or "our" wherever used herein refer to the Company together with all of its consolidated U.S. and foreign subsidiary companies, unless the context indicates to the contrary.

We are one of the world's leading manufacturers of tires, engaging in operations in most regions of the world. Our 2010 net sales were $18.8 billion, and Goodyear's net loss in 2010 was $216 million. Together with our U.S. and international subsidiaries and joint ventures, we develop, manufacture, market and distribute tires for most applications. We also manufacture and market rubber-related chemicals for various applications. We are one of the world's largest operators of commercial truck service and tire retreading centers. In addition, we operate approximately 1,500 tire and auto service center outlets where we offer our products for retail sale and provide automotive repair and other services. We manufacture our products in 56 manufacturing facilities in 22 countries, including the United States, and we have marketing operations in almost every country around the world. We employ approximately 72,000 full-time and temporary associates worldwide.

AVAILABLE INFORMATION

We make available free of charge on our website, http://www.goodyear.com, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports as soon as reasonably practicable after we file or furnish such reports to the Securities and Exchange Commission (the "SEC"). The information on our website is not incorporated by reference in or considered to be a part of this Annual Report on Form 10-K.

RECENT DEVELOPMENTS

Sale of Farm Tire Businesses. On December 13, 2010, we entered into agreements with Titan Tire Corporation, a subsidiary of Titan International Inc., to sell our European and Latin American farm tire businesses, including a licensing agreement that will allow Titan to manufacture and sell Goodyear-brand farm tires in Europe, Latin America and North America, for approximately $130 million, subject to post-closing conditions and adjustments. The Latin American portion of the transaction is expected to close in the first half of 2011. The European portion of the transaction is subject to the exercise of a put option by us following completion of a social plan related to the previously announced discontinuation of consumer tire production at one of our facilities in Amiens, France and required consultation with various works councils. Assuming both the Latin American and European portions of the transaction are consummated, our operating results, excluding the estimated loss on the sale of the European portion of the transaction of approximately $50 million to $75 million, are not expected to be materially affected, although the impact on segment operating income will vary by region. Following the respective sales, EMEA's operating income is expected to be favorably affected by approximately $20 million to $25 million on an annualized basis due to recent operating losses in the European farm tire business, while Latin American Tire's operating income is expected to be unfavorably affected by approximately $30 million to $35 million on an annualized basis.

Union City, Tennessee Rationalization Plan. On February 4, 2011, we approved a plan to close our tire manufacturing facility in Union City, Tennessee. The facility, which has about 1,900 associates, produces radial passenger car and light truck tires. We expect the closure of the Union City facility to be substantially completed in the fourth quarter of 2011. The estimated charges associated with the planned closure are expected to be approximately $270 million ($270 million after-tax), of which approximately $140 million are expected to be cash charges, including approximately $65 million related to severance benefits, including continuing medical coverage, and approximately $75 million related to other associate-related and exit costs, and approximately $130 million are expected to be non-cash charges, including approximately $60 million related to accelerated depreciation and asset write-offs and approximately $70 million related to pension and retiree medical costs. Under

the terms of our pre-existing benefit plans, we recorded a charge of $160 million ($160 million after-tax) associated with the plan in the fourth quarter of 2010. The remainder of the charges will be substantially recognized within the next 12 months. The plan will eliminate physical capacity of approximately 12 million tires per year, although we have only manufactured seven million tires per year at this facility since we adopted a five-day schedule in 2009, and is expected to provide annual cost savings of approximately $80 million.

Amiens, France Rationalization Plan. On May 26, 2009, we announced a plan that would discontinue consumer tire production at one of our manufacturing facilities in Amiens, France. In the fourth quarter of 2010, we recorded $43 million of additional charges and now estimate that the total charges associated with this plan will be $107 million (approximately $70 million after taxes and minority interest). These total charges primarily relate to cash severance payments that will be made as actions are taken in the future. This action would eliminate approximately six million units of high-cost capacity and is now expected to be completed by the fourth quarter of 2011.

DESCRIPTION OF GOODYEAR'S BUSINESS

General Information Regarding Our Segments

For the year ended December 31, 2010, we operated our business through four operating segments representing our regional tire businesses: North American Tire; Europe, Middle East and Africa Tire ("EMEA"); Latin American Tire; and Asia Pacific Tire.

Financial information related to our operating segments for the three year period ended December 31, 2010 appears in the Note to the Consolidated Financial Statements No. 17, Business Segments.

Our principal business is the development, manufacture, distribution and sale of tires and related products and services worldwide. We manufacture and market numerous lines of rubber tires for:

- automobiles
- trucks
- buses
- aircraft
- motorcycles
- farm implements
- earthmoving and mining equipment
- industrial equipment, and
- various other applications.

In each case, our tires are offered for sale to vehicle manufacturers for mounting as original equipment ("OE") and for replacement worldwide. We manufacture and sell tires under the Goodyear, Dunlop, Kelly, Fulda, Debica and Sava brands and various other Goodyear owned "house" brands, and the private-label brands of certain customers. In certain geographic areas we also:

- retread truck, aviation and off-the-road, or OTR, tires,
- manufacture and sell tread rubber and other tire retreading materials,
- provide automotive repair services and miscellaneous other products and services, and
- manufacture and sell flaps for truck tires and other types of tires.

Our principal products are new tires for most applications. Approximately 84% of our sales in 2010 were for new tires, compared to 83% and 82% in 2009 and 2008, respectively. Sales of chemical products and natural rubber to unaffiliated customers were 6% in 2010, 4% in 2009 and 6% in 2008 of our consolidated sales (14%, 9% and 14% of

North American Tire's total sales in 2010, 2009 and 2008, respectively). The percentages of each segment's sales attributable to new tires during the periods indicated were:

Sales of New Tires By	Year Ended December 31, 2010	2009	2008
North American Tire	74%	77%	73%
Europe, Middle East and Africa Tire	93	88	88
Latin American Tire	93	93	92
Asia Pacific Tire	84	83	82

Each segment exports tires to other segments. The financial results of each segment exclude sales of tires exported to other segments, but include operating income derived from such transactions.

Goodyear does not include motorcycle, all terrain vehicle or consigned tires in reported tire unit sales.

Tire unit sales for each segment during the periods indicated were:

GOODYEAR'S ANNUAL TIRE UNIT SALES — SEGMENT

(In millions of tires)	Year Ended December 31, 2010	2009	2008
North American Tire	66.7	62.7	71.1
Europe, Middle East and Africa Tire	72.0	66.0	73.6
Latin American Tire	20.7	19.1	20.0
Asia Pacific Tire	21.4	19.2	19.8
Goodyear worldwide tire units	180.8	167.0	184.5

Our replacement and OE tire unit sales during the periods indicated were:

GOODYEAR'S ANNUAL TIRE UNIT SALES — REPLACEMENT AND OE

(In millions of tires)	Year Ended December 31, 2010	2009	2008
Replacement tire units	133.0	128.0	134.1
OE tire units	47.8	39.0	50.4
Goodyear worldwide tire units	180.8	167.0	184.5

New tires are sold under highly competitive conditions throughout the world. On a worldwide basis, we have two major competitors: Bridgestone (based in Japan) and Michelin (based in France). Other significant competitors include Continental, Cooper, Hankook, Kumho, Pirelli, Toyo, Yokohama and various regional tire manufacturers.

We compete with other tire manufacturers on the basis of product design, performance, price and terms, reputation, warranty terms, customer service and consumer convenience. Goodyear and Dunlop brand tires enjoy a high recognition factor and have a reputation for performance and quality. The Kelly, Debica, Sava and Fulda brands and various house brand tire lines offered by us, and tires manufactured and sold by us to private brand customers, compete primarily on the basis of value and price.

Although we do not consider our tire businesses to be seasonal to any significant degree, we historically sell more replacement tires in North American Tire and Europe, Middle East and Africa Tire during the third quarter.

Global Alliance

We have a global alliance with Sumitomo Rubber Industries, Ltd. ("SRI"). Under the global alliance, we own 75% and SRI owns 25% of two companies, Goodyear Dunlop Tires Europe B.V. ("GDTE") and Goodyear Dunlop Tires North America, Ltd. ("GDTNA"). GDTE owns and operates substantially all of our tire businesses in Western Europe. GDTNA owns the Dunlop brand and operates certain related businesses in North America. In Japan, we

own 25%, and SRI owns 75%, of two companies, one for the sale of Goodyear brand passenger and truck tires for replacement in Japan and the other for the sale of Goodyear brand and Dunlop brand tires to vehicle manufacturers in Japan. We also own 51%, and SRI owns 49%, of a company that coordinates and disseminates both commercialized tire technology and non-commercialized technology among Goodyear and SRI, the joint ventures and their respective affiliates, and we own 80%, and SRI owns 20%, of a global purchasing company. The global alliance also provided for the investment by Goodyear and SRI in the common stock of the other.

SRI has the right to require us to purchase its ownership interests in GDTE and GDTNA, which we refer to as "exit rights," if there is a change in control of Goodyear, a bankruptcy of Goodyear or a breach, subject to notice and the opportunity to cure, of the global alliance agreements by Goodyear that has a material adverse effect on the rights of SRI or its affiliates under the global alliance agreements, taken as a whole. In addition, SRI has exit rights upon the occurrence of the following events:

- the adoption or material revision of a business plan for GDTE or GDTNA if SRI disagrees with the adoption or revision;
- certain acquisitions, investments or dispositions exceeding 10% but less than 20% of the fair market value of GDTE or GDTNA or the acquisition by GDTE or GDTNA of all or a material portion of another tire manufacturer or tire distributor;
- if SRI decides not to subscribe to its pro rata share of any permitted new issue of non-voting equity capital authorized pursuant to the provisions of the shareholders agreements relating to GDTE or GDTNA;
- if GDTE, GDTNA or Goodyear takes an action which, in the reasonable opinion of SRI, has, or is likely to have, a continuing material adverse effect on the tire business relating to the Dunlop brand; or
- if at any time SRI's ownership of the shares of GDTE or GDTNA is less than 10% of the equity capital of that joint venture company.

SRI must give written notice to Goodyear of its intention to exercise its exit rights no later than three months from the date such exit rights became exercisable, except that notice of SRI's intention to exercise its exit rights upon the occurrence of the event described in the last bullet point above may be given as long as SRI's share ownership is less than 10%. If SRI were to exercise any of its exit rights, the global alliance agreements provide that the purchase price would be based on the fair value of SRI's 25% minority shareholder's interest in GDTE and GDTNA. The purchase price would be determined through a negotiation process where, if no mutually agreed purchase price was determined, a binding arbitration process would determine the purchase price. Goodyear would retain the rights to the Dunlop brand in Europe and North America following any such purchase. As of the date of this filing, SRI has not provided us notice of any exit rights that have become exercisable.

North American Tire

North American Tire, our largest segment in terms of revenue, develops, manufactures, distributes and sells tires and related products and services in the United States and Canada. North American Tire manufactures tires in eight plants in the United States and two plants in Canada.

North American Tire manufactures and sells tires for automobiles, trucks, motorcycles, buses, earthmoving and mining equipment, commercial and military aviation and industrial equipment, and for various other applications.

Goodyear brand radial passenger tire lines sold in the United States and Canada include Assurance Fuel Max, Assurance TripleTred and our new Assurance ComforTred Touring for the premium passenger tire market; while our Eagle family of product lines is available for the high performance market and includes RunOnFlat extended mobility technology ("ROF" or "EMT") tires. The major lines of Goodyear brand radial tires offered in the United States and Canada for sport utility vehicles and light trucks include Wrangler, featuring technologies including MT/R with Kevlar, SilentArmor and DuraTrac; and Fortera, featuring TripleTred Technology. Goodyear also offers Dunlop brand radial passenger tire lines, including Signature and SP Sport, and Fierce performance tires, as well as Dunlop brand radials for light trucks including the Rover and Grandtrek lines. Additionally, North American Tire manufactures and sells several lines of Kelly brand tires as well as private brand radial passenger and light truck tires in the United States and Canada.

North American Tire manufactures and sells all-steel, radial medium truck tires under the Goodyear, Dunlop and Kelly brands, for use on commercial trucks and trailers.

North American Tire also:

- retreads truck, aviation and OTR tires, primarily as a service to its commercial customers,
- manufactures tread rubber and other tire retreading materials for trucks, heavy equipment and aviation,
- provides automotive maintenance and repair services at approximately 680 retail outlets primarily under the Goodyear or Just Tires names,
- provides trucking fleets with new tires, retreads, mechanical service, preventative maintenance and roadside assistance from approximately 170 Wingfoot Commercial Centers,
- sells automotive repair and maintenance items, automotive equipment and accessories and other items to dealers and consumers,
- sells chemical and natural rubber products to Goodyear's other business segments and to unaffiliated customers, and
- provides miscellaneous other products and services.

Markets and Other Information

Tire unit sales to replacement customers and to OE customers served by North American Tire during the periods indicated were:

NORTH AMERICAN TIRE UNIT SALES — REPLACEMENT AND OE

	Year Ended December 31,		
(In millions of tires)	2010	2009	2008
Replacement tire units	50.8	50.0	51.4
OE tire units	15.9	12.7	19.7
Total tire units	66.7	62.7	71.1

North American Tire is a major supplier of tires to most manufacturers of automobiles, motorcycles, trucks and aircraft that have production facilities located in North America.

North American Tire's primary competitors are Bridgestone and Michelin. Other significant competitors include Continental, Cooper and several Asian manufacturers.

Goodyear, Dunlop and Kelly brand tires are sold in the United States and Canada through several channels of distribution. The principal channel for Goodyear brand tires is a large network of independent dealers. Goodyear, Dunlop and Kelly brand tires are also sold to numerous national and regional retail marketing firms in the United States. Several lines of private label brand tires are sold to independent dealers, national and regional wholesale marketing organizations and various other retail marketers.

We are subject to regulation by the National Highway Traffic Safety Administration ("NHTSA"), which has established various standards and regulations applicable to tires sold in the United States for highway use. NHTSA has the authority to order the recall of automotive products, including tires, having safety defects related to motor vehicle safety. In addition, the Transportation Recall Enhancement, Accountability, and Documentation Act (the "TREAD Act") imposes numerous requirements with respect to tire recalls. The TREAD Act also requires tire manufacturers to, among other things, remedy tire safety defects without charge for five years and comply with revised and more rigorous tire standards.

Europe, Middle East And Africa Tire

Europe, Middle East and Africa Tire ("EMEA"), our second largest segment in terms of revenue, develops, manufactures, distributes and sells tires for automobiles, trucks, motorcycles, farm implements and construction equipment throughout Europe, the Middle East and Africa, exports tires to other regions of the world and provides

miscellaneous other products and services. EMEA manufactures tires in 16 plants in England, France, Germany, Luxembourg, Poland, Slovenia, South Africa and Turkey. EMEA:

- manufactures and sells Goodyear, Dunlop, Debica, Sava and Fulda brands and other house brand passenger, truck, motorcycle, farm and OTR tires,
- sells new aviation tires, and manufactures and sells retreaded aviation tires,
- exports tires for sale in North America and other regions of the world,
- provides various retreading and related services for truck and OTR tires, primarily for its commercial truck tire customers,
- offers automotive repair services at retail outlets, and
- provides miscellaneous other products and services.

Markets and Other Information

Tire unit sales to replacement customers and to OE customers served by EMEA during the periods indicated were:

EUROPE, MIDDLE EAST AND AFRICA TIRE UNIT SALES — REPLACEMENT AND OE

	Year Ended December 31,		
(In millions of tires)	2010	2009	2008
Replacement tire units	55.6	52.8	55.9
OE tire units	16.4	13.2	17.7
Total tire units	72.0	66.0	73.6

EMEA is a significant supplier of tires to most manufacturers of automobiles, trucks and farm and construction equipment located in Europe, the Middle East and Africa.

EMEA's main competitors are Michelin, Bridgestone, Continental, Pirelli, several regional and local tire producers and imports from other regions, primarily Asia.

Goodyear and Dunlop brand tires are sold for replacement in EMEA through various channels of distribution, principally independent multi-brand tire dealers. In some areas, Goodyear brand tires, as well as Dunlop, Debica, Sava, and Fulda brand tires, are distributed through independent dealers, regional distributors and retail outlets, of which approximately 200 are owned by Goodyear.

Our European operations are subject to regulation by the European Union. In 2009, two important regulations, the Tire Safety Regulation and the Tire Labeling Regulation, applicable to tires sold in the European Union were adopted. The Tire Safety Regulation sets performance standards that tires for cars and light and commercial trucks need to meet for rolling resistance, wet grip braking and noise in order to be sold in the European Union, and will become effective between 2012 and 2020. The Tire Labeling Regulation applies to all car and light and commercial truck tires produced after July 1, 2012 and requires that tires be labeled to inform consumers about the tire's fuel efficiency, wet grip and noise characteristics. For both of these regulations, additional implementing rules are being developed and are expected to be finalized by the end of 2011.

LATIN AMERICAN TIRE

Our Latin American Tire segment manufactures and sells automobile, truck and farm tires throughout Central and South America and in Mexico, sells tires to various export markets, retreads and sells commercial truck, aviation and OTR tires, and provides other products and services. Latin American Tire manufactures tires in six plants in Brazil, Chile, Colombia, Peru and Venezuela.

Latin American Tire manufactures and sells several lines of passenger, light and medium truck and farm tires. Latin American Tire also:

- manufactures and sells pre-cured treads for truck tires,
- retreads, and provides various materials and related services for retreading, truck and aviation tires,
- manufactures other products, including OTR tires,

- manufactures and sells new aviation tires, and
- provides miscellaneous other products and services.

Markets and Other Information

Tire unit sales to replacement customers and to OE customers served by Latin American Tire during the periods indicated were:

LATIN AMERICAN TIRE UNIT SALES — REPLACEMENT AND OE

(In millions of tires)	Year Ended December 31, 2010	2009	2008
Replacement tire units	13.9	13.1	13.9
OE tire units	6.8	6.0	6.1
Total tire units	20.7	19.1	20.0

Latin American Tire is a significant supplier of tires to most manufacturers of automobiles, trucks and farm and construction equipment located in the region. Goodyear brand tires are sold for replacement primarily through independent dealers. Significant competitors include Pirelli, Bridgestone, Michelin and Continental.

Asia Pacific Tire

Our Asia Pacific Tire segment manufactures and sells tires for automobiles, light and medium trucks, farm, construction and mining equipment and the aviation industry throughout the Asia Pacific region. Asia Pacific Tire manufactures tires in seven plants in China, India, Indonesia, Japan, Malaysia and Thailand. Asia Pacific Tire also:

- retreads truck tires and aviation tires,
- manufactures tread rubber and other tire retreading materials for truck and aviation tires,
- provides automotive maintenance and repair services at retail outlets, and
- provides miscellaneous other products and services.

Markets and Other Information

Tire unit sales to replacement customers and OE customers served by Asia Pacific Tire during the periods indicated were:

ASIA PACIFIC TIRE UNIT SALES — REPLACEMENT AND OE

(In millions of tires)	Year Ended December 31, 2010	2009	2008
Replacement tire units	12.7	12.1	12.9
OE tire units	8.7	7.1	6.9
Total tire units	21.4	19.2	19.8

Asia Pacific Tire's major competitors are Bridgestone and Michelin along with many other global brands present in different areas, including Continental, Dunlop, Yokohama, Pirelli, and a large number of regional and local tire producers.

Asia Pacific Tire sells primarily Goodyear brand tires throughout the region and also sells the Dunlop brand in Australia and New Zealand. Other brands of tires, such as Kelly, Fulda and Sava, are sold in smaller quantities. Tires are sold through a network of licensed or franchised stores and multi-brand retailers through a network of wholesale dealers. In Australia and New Zealand, we also operate a network of approximately 400 retail stores under the Beaurepaires and Frank Allen brands.

GENERAL BUSINESS INFORMATION

Sources and Availability of Raw Materials

The principal raw materials used by Goodyear are natural and synthetic rubber. Natural rubber typically accounts for approximately half of all rubber consumed by us on an annual basis. We purchase all of our requirements for natural rubber in the world market. Our plants located in Beaumont and Houston, Texas, supply the major portion of our global synthetic rubber requirements.

Significant quantities of steel cord are used for radial tires, a portion of which we produce. Other important raw materials we use are carbon black, fabrics and petrochemical-based commodities. Substantially all of these raw materials are purchased from independent suppliers, except for certain chemicals we manufacture. We purchase most raw materials in significant quantities from several suppliers, except in those instances where only one or a few qualified sources are available. We anticipate the continued availability of all raw materials we will require during 2011, subject to spot shortages and unexpected disruptions caused by natural disasters such as hurricanes and other similar events.

Substantial quantities of fuel and other petrochemical-based commodities are used in the production of tires, synthetic rubber and other products. Supplies of such fuels and commodities have been and are expected to continue to be available to us in quantities sufficient to satisfy our anticipated requirements, subject to spot shortages.

In 2010, raw material costs increased by approximately 12% in our tire businesses compared to 2009, primarily driven by an increase in the cost of natural and synthetic rubber. We expect our raw material costs in the first quarter of 2011 to increase 25% to 30% when compared with the first quarter of 2010. Similar increases are expected for the second quarter of 2011 compared with the second quarter of 2010. We expect raw material costs to peak in the third quarter of 2011. However, natural rubber prices and petrochemical-based commodity prices have experienced significant volatility, and this estimate could change significantly based on fluctuations in the cost of these and other key raw materials.

Patents and Trademarks

We own approximately 2,400 product, process and equipment patents issued by the United States Patent Office and approximately 3,700 patents issued or granted in other countries around the world. We also have licenses under numerous patents of others. We have approximately 500 applications for United States patents pending and approximately 2,000 patent applications on file in other countries around the world. While such patents, patent applications and licenses as a group are important, we do not consider any patent, patent application or license, or any related group of them, to be of such importance that the loss or expiration thereof would materially affect Goodyear or any business segment.

We own, control or use approximately 1,700 different trademarks, including several using the word "Goodyear" or the word "Dunlop." Approximately 11,600 registrations and 800 pending applications worldwide protect these trademarks. While such trademarks as a group are important, the only trademarks we consider material to our business, or to the business of any of our segments, are those using the word "Goodyear," and with respect to certain of our international business segments, those using the word "Dunlop." We believe our trademarks are valid and most are of unlimited duration as long as they are adequately protected and appropriately used.

Backlog

Our backlog of orders is not considered material to, or a significant factor in, evaluating and understanding any of our business segments or our businesses considered as a whole.

Research and Development

Our direct and indirect expenditures on research, development and certain engineering activities relating to the design, development and significant modification of new and existing products and services and the formulation

and design of new, and significant improvements to existing, manufacturing processes and equipment during the periods indicated were:

(In millions)	Year Ended December 31, 2010	2009	2008
Research and development expenditures	$342	$337	$366

Employees

At December 31, 2010, we employed approximately 72,000 full-time and temporary people throughout the world, including approximately 39,000 people covered under collective bargaining agreements. At December 31, 2009, we employed approximately 69,000 full-time and temporary people throughout the world, including approximately 39,000 people covered under collective bargaining agreements. Approximately 10,000 of our employees in the United States are covered by a master collective bargaining agreement with the United Steelworkers ("USW"), which expires in July 2013. Approximately 19,000 of our employees outside of the United States are covered by union contracts which currently have expired or that will expire in 2011, primarily in Brazil, France, Germany, Luxembourg, Poland, Turkey, and Venezuela. In addition, approximately 1,000 of our employees in the United States are covered by other contracts with the USW and various other unions. Unions represent the major portion of our employees in Europe, Latin America and Asia.

Compliance with Environmental Regulations

We are subject to extensive regulation under environmental and occupational health and safety laws and regulations. These laws and regulations relate to, among other things, air emissions, discharges to surface and underground waters and the generation, handling, storage, transportation and disposal of waste materials and hazardous substances. We have several continuing programs designed to ensure compliance with Federal, state and local environmental and occupational safety and health laws and regulations. We expect capital expenditures for pollution control facilities and occupational safety and health projects to be approximately $46 million during 2011 and approximately $66 million during 2012.

We expended approximately $55 million during 2010, and expect to expend approximately $56 million and $57 million during 2011 and 2012, respectively, to maintain and operate our pollution control facilities and conduct our other environmental activities, including the control and disposal of hazardous substances. These expenditures are expected to be sufficient to comply with existing environmental laws and regulations and are not expected to have a material adverse effect on our competitive position.

In the future, we may incur increased costs and additional charges associated with environmental compliance and cleanup projects necessitated by the identification of new waste sites, the impact of new environmental laws and regulatory standards, or the availability of new technologies. Compliance with Federal, state and local environmental laws and regulations in the future may require a material increase in our capital expenditures and could adversely affect our earnings and competitive position.

INFORMATION ABOUT INTERNATIONAL OPERATIONS

We engage in manufacturing and/or sales operations in most countries in the world, often through subsidiary companies. We have manufacturing operations in 22 countries, including the United States. Most of our international manufacturing operations are engaged in the production of tires. Certain other products are also manufactured in plants located outside the United States. Financial information related to our geographic areas for the three year period ended December 31, 2010 appears in the Note to the Consolidated Financial Statements No. 17, Business Segments, and is incorporated herein by reference.

In addition to the ordinary risks of the marketplace, in some countries our operations are affected by price controls, import controls, labor regulations, tariffs, extreme inflation and/or fluctuations in currency values. Furthermore, in certain countries where we operate, transfers of funds into or out of such countries are generally or periodically subject to various restrictive governmental regulations. See "Item 1A. Risk Factors" for a discussion of the risks related to our international operations.

EXECUTIVE OFFICERS OF THE REGISTRANT

Set forth below are: (1) the names and ages of all executive officers of the Company at February 10, 2011, (2) all positions with the Company presently held by each such person and (3) the positions held by, and principal areas of responsibility of, each such person during the last five years.

Name	Position(s) Held	Age
Richard J. Kramer	**Chairman of the Board, Chief Executive Officer and President**	**47**

Mr. Kramer joined Goodyear in March 2000 as Vice President — Corporate Finance, serving in that capacity as Goodyear's principal accounting officer until August 2002, when he was elected Vice President, Finance — North American Tire. In August 2003, he was named Senior Vice President, Strategic Planning and Restructuring, and in June 2004 was elected Executive Vice President and Chief Financial Officer. Mr. Kramer was elected President, North American Tire in March 2007 and continued to serve as Chief Financial Officer until August 2007. In June 2009, Mr. Kramer was elected Chief Operating Officer and continued to serve as President, North American Tire until February 16, 2010. He was elected Chief Executive Officer and President effective April 13, 2010 and Chairman effective October 1, 2010. Mr. Kramer is the principal executive officer of the Company.

Curt J. Andersson	**President, North American Tire**	**49**

Mr. Andersson was named President, North American Tire on February 16, 2010. Mr. Andersson is the executive officer responsible for Goodyear's operations in North America. Prior to joining Goodyear, Mr. Andersson was President of the Crouse-Hinds division of Cooper Industries plc, a global manufacturer of electrical products, from 2003 until February 2010.

Arthur de Bok	**President, Europe, Middle East and Africa Tire**	**48**

After joining Goodyear on December 31, 2001, Mr. de Bok served in various managerial positions in Goodyear's European operations. Mr. de Bok was named President, European Union Tire in September 2005. Effective February 1, 2008, Mr. de Bok became President, Europe, Middle East and Africa Tire, the new operating segment created by the combination of Goodyear's European Union and Eastern Europe business units. Mr. de Bok is the executive officer responsible for Goodyear's operations in Europe, the Middle East and Africa.

Jaime Cohen Szulc	**President, Latin American Tire**	**48**

Mr. Szulc joined Goodyear in September 2010 and became President, Latin American Tire in December 2010, succeeding Eduardo Fortunato upon his retirement. Mr. Szulc is the executive officer responsible for Goodyear's operations in Mexico, Central America and South America. Prior to joining Goodyear, he was Senior Vice President and Chief Marketing Officer of Levi Strauss & Co., a global apparel company, from August 2009 until August 2010. He was also previously employed by Eastman Kodak Company, a global manufacturer of imaging technology products, in a variety of roles of increasing responsibility from 1998 until March 2009, including most recently as Managing Director, Global Customer Operations and Chief Operating Officer for the Consumer Digital Group and Corporate Vice President.

Pierre E. Cohade	**President, Asia Pacific Tire**	**49**

Mr. Cohade joined Goodyear as President, Asia Pacific Tire in October 2004. Mr. Cohade is the executive officer responsible for Goodyear's operations in Asia, Australia and the Western Pacific.

Darren R. Wells	**Executive Vice President and Chief Financial Officer**	**45**

Mr. Wells joined Goodyear as Vice President and Treasurer in August 2002. He was named Senior Vice President, Business Development and Treasurer in May 2005, was named Senior Vice President, Finance and Strategy in March 2007, and was named Executive Vice President and Chief Financial Officer in October 2008. Mr. Wells is Goodyear's principal financial officer.

Damon J. Audia	**Senior Vice President, Finance, Asia Pacific Region**	**40**

Mr. Audia joined Goodyear as Assistant Treasurer, Capital Markets in December 2004 and was elected Vice President and Treasurer in March 2007. Mr. Audia was elected Senior Vice President, Finance and Treasurer in December 2008 and Senior Vice President, Finance, Asia Pacific Region in June 2010. Mr. Audia is the executive officer responsible for the finance activities of Goodyear's operations in Asia, Australia and the Western Pacific.

Name	Position(s) Held	Age
David L. Bialosky	**Senior Vice President, General Counsel and Secretary**	**53**

Mr. Bialosky joined Goodyear as Senior Vice President, General Counsel and Secretary in September 2009. He is Goodyear's chief legal officer. Prior to joining Goodyear, Mr. Bialosky served in legal positions of increasing responsibility at TRW Inc., TRW Automotive Inc. and TRW Automotive Holdings Corp. for 20 years, including most recently as Executive Vice President, General Counsel and Secretary of TRW Automotive Holdings Corp., a global supplier of automotive parts, from April 2004 until September 2009.

John D. Fish	**Senior Vice President, Global Operations**	**53**

Mr. Fish joined Goodyear as Senior Vice President, Global Operations in October 2009. He is the executive officer responsible for Goodyear's global manufacturing and related supply chain activities. Prior to joining Goodyear, Mr. Fish served in operations, manufacturing and supply chain positions of increasing responsibility at General Electric Company for almost 29 years, including most recently as Vice President of consumer global supply chain for GE's Consumer and Industrial business from 2004 until October 2009.

Jean-Claude Kihn	**Senior Vice President and Chief Technical Officer**	**51**

Mr. Kihn served in various managerial and technical posts, most recently as General Director of Goodyear's Technical Center in Akron, Ohio, prior to his election as Senior Vice President and Chief Technical Officer in January 2008. Mr. Kihn is the executive officer responsible for Goodyear's research and tire technology development, engineering and product quality worldwide. He has been a Goodyear employee since 1988.

Joseph B. Ruocco	**Senior Vice President, Human Resources**	**51**

Mr. Ruocco joined Goodyear as Senior Vice President, Human Resources in August 2008. Mr. Ruocco is the executive officer responsible for Goodyear's human resources activities worldwide. Prior to joining Goodyear, Mr. Ruocco served in human resources positions of increasing responsibility at General Electric Company for 23 years, including as Vice President, Human Resources, GE Consumer and Industrial from December 2003 to December 2006, and Vice President, Human Resources, GE Industrial from December 2006 to July 2008.

Charles L. Sinclair	**Senior Vice President, Global Communications**	**59**

Mr. Sinclair served in various public relations and communications positions until 2002, when he was named Vice President, Public Relations and Communications for North American Tire. In June 2003, he was named Senior Vice President, Global Communications. Mr. Sinclair is the executive officer responsible for Goodyear's worldwide communications activities. He has been a Goodyear employee since 1984.

Thomas A. Connell	**Vice President and Controller**	**62**

Mr. Connell joined Goodyear in September 2003 and served as Vice President and Controller until February 2008. Mr. Connell was elected Vice President and Chief Information Officer effective March 1, 2008 and was elected Vice President and Controller in December 2008. He continued to serve as Chief Information Officer until April 2010. Mr. Connell is Goodyear's principal accounting officer. Mr. Connell will retire effective March 1, 2011.

Isabel H. Jasinowski	**Vice President, Government Relations**	**61**

Ms. Jasinowski served in various government relations posts until she was appointed Vice President of Government Relations in 1995. In April 2001, Ms. Jasinowski was elected Vice President, Government Relations, serving as the executive officer primarily responsible for Goodyear's governmental relations and public policy activities. She has been a Goodyear employee since 1981.

Stephen R. McClellan	**President, Consumer Tires, North American Tire**	**45**

Mr. McClellan served in various finance and retail management positions with Goodyear until he was named President of Wingfoot Commercial Tire Systems in December 2001. He was appointed Vice President, Goodyear Commercial Tire Systems in September 2003 and was named President, Consumer Tires, North American Tire in August 2008. Mr. McClellan is the executive officer responsible for the business activities of Goodyear's consumer tire business in North America. He has been a Goodyear employee since 1987.

Name	Position(s) Held	Age
Richard J. Noechel	**Vice President, Finance, North American Tire**	**42**

Mr. Noechel joined Goodyear in October 2004 as Assistant Controller. He was Chief Financial Officer of Goodyear's South Pacific Tyre subsidiary in Australia from April 2006 to February 2008 and was Vice President and Controller from March 1, 2008 until his election as Vice President, Finance, North American Tire in December 2008. Mr. Noechel is the executive officer responsible for the finance activities of Goodyear's operations in North America. Mr. Noechel will become Vice President and Controller effective March 1, 2011.

Mark W. Purtilar	**Vice President and Chief Procurement Officer**	**50**

Mr. Purtilar joined Goodyear as Vice President and Chief Procurement Officer in September 2007. He is the executive officer responsible for Goodyear's global procurement activities. Prior to joining Goodyear, Mr. Purtilar was vice president of global procurement for commercial vehicle systems at ArvinMeritor Automotive Inc., a global supplier of automotive parts, from 2004 until September 2007.

Michel Rzonzef	**President, Eastern Europe, Middle East and Africa Countries, Europe, Middle East and Africa Tire**	**47**

Mr. Rzonzef served in various managerial, sales and marketing, and engineering posts until December 2002 when he was appointed Vice President, Sales and Marketing for our former Eastern Europe, Middle East and Africa Tire strategic business unit. Effective February 1, 2008, Mr. Rzonzef was appointed President, Eastern Europe, Middle East and Africa Countries within our Europe, Middle East and Africa Tire strategic business unit. He has been a Goodyear employee since 1988.

No family relationship exists between any of the above executive officers or between the executive officers and any director of the Company.

Each executive officer is elected by the Board of Directors of the Company at its annual meeting to a term of one year or until his or her successor is duly elected. In those instances where the person is elected at other than an annual meeting, such person's term will expire at the next annual meeting.

ITEM 1A. RISK FACTORS.

You should carefully consider the risks described below and other information contained in this Annual Report on Form 10-K when considering an investment decision with respect to our securities. Additional risks and uncertainties not presently known to us, or that we currently deem immaterial, may also impair our business operations. Any of the events discussed in the risk factors below may occur. If they do, our business, results of operations, financial condition or liquidity could be materially adversely affected. In such an instance, the trading price of our securities could decline, and you might lose all or part of your investment.

If we do not achieve projected savings from our cost reduction initiatives, including our USW collective bargaining agreement, or successfully implement other strategic initiatives our operating results, financial condition and liquidity may be materially adversely affected.

Our business continues to be impacted by trends that have negatively affected the tire industry in general, as the global economy continued its recovery from the recessionary economic conditions that existed in many parts of the world during 2008 and 2009, particularly in North America and Europe. These negative trends include rapidly rising raw material and energy costs, wage inflation in emerging markets, continued pressure from our unfunded pension obligations, and the devaluation of the currency and economic weakness in Venezuela. In addition, global tire industry demand, while improving, continues to be below pre-recessionary levels in North America and remains hard to predict, especially for OE production. If these overall trends continue or worsen, then our operational and financial condition could be adversely affected. Unlike most other tire manufacturers, we also face the continuing burden of legacy pension costs.

In order to offset the impact of these trends, we continue to implement various cost reduction initiatives and expect to achieve $1.0 billion in aggregate gross cost savings from 2010 through 2012 through our cost savings plan, which includes expected savings from continuous improvement initiatives, including savings under our USW agreement described below, increased low-cost country sourcing, high-cost capacity reductions, initiatives to reduce raw material costs and reduced selling, administrative and general expenses.

We entered into a four-year contract with the USW in September 2009 for our seven USW-represented tire plants in the United States. The contract enhances the competitiveness of those plants through improvements in productivity, wage and benefit savings and added flexibility. These changes are expected to provide us with cost savings of approximately $215 million over the term of the contract. Combined with savings realized through pre-bargain agreements to reduce staffing levels at five plants, we expect to realize $555 million in total savings over the term of the agreements. If we fail to successfully implement the improvements in productivity and flexibility permitted by our USW agreements, we may be unable to realize all of the expected cost savings and our competitive position may be harmed. In turn, our results of operations and financial condition could be materially adversely affected.

In December 2010, we entered into agreements to sell our European and Latin American farm tire businesses. The European portion of the transaction is subject to the exercise of a put option by us following completion of a social plan related to the previously announced discontinuation of consumer tire production at one of our facilities in Amiens, France and required consultation with various works councils. Significant delays in the completion of the social plan could prevent us from exercising the put option.

We have announced other important strategic initiatives, such as increasing our low-cost manufacturing capacity, reducing our high-cost manufacturing capacity, such as our plan to close our Union City, Tennessee manufacturing facility, increasing sales in emerging markets and implementing new enterprise resource planning systems. The failure to implement successfully our important strategic initiatives may materially adversely affect our results of operations, financial condition and liquidity.

Our performance is also dependent on our ability to continue to improve the proportion, or mix, of higher margin tires we sell. In order to continue this improvement, we must be successful in marketing and selling products that offer higher margins such as the Assurance, Fuel Max, Eagle and Fortera lines of tires and in developing additional higher margin tires that achieve broad market acceptance in North America and elsewhere. Shifts in consumer demand away from higher margin tires could materially adversely affect our business.

We cannot assure you that our cost reduction and other initiatives will be successful. If not, we may not be able to achieve or sustain future profitability, which would impair our ability to meet our debt and other obligations and would otherwise negatively affect our financial condition, results of operations and liquidity.

Higher raw material and energy costs may materially adversely affect our operating results and financial condition.

Raw material costs increased significantly over the past few years, and may continue to do so, driven by increases in prices of natural rubber and petrochemical-based commodities. Market conditions or contractual obligations may prevent us from passing these increased costs on to our customers through timely price increases. Additionally, higher raw material costs around the world may offset our efforts to reduce our cost structure. As a result, higher raw material and energy costs could result in declining margins and operating results and adversely affect our financial condition. The volatility of raw material costs may cause our margins, operating results and liquidity to fluctuate.

Our pension plans are significantly underfunded and, in the future, the underfunding levels of our pension plans and our pension expense could materially increase.

Many of our U.S. and our non-U.S. employees participate in defined benefit pension plans, although effective December 31, 2008 we froze our U.S. salaried pension plans and effective August 29, 2009 we closed participation in our U.S. hourly pension plans for employees covered by the USW master labor contract. Over time, we have experienced periods of declines in interest rates and pension asset values. As a result, our pension plans are significantly underfunded. Further declines in interest rates or the market values of the securities held by the plans, or certain other changes, could materially increase the underfunded status of our plans in 2011 and beyond and affect the level and timing of required contributions in 2012 and beyond. The unfunded amount of the projected benefit obligation for our U.S. and non-U.S. pension plans was $1,927 million and $622 million, respectively, at December 31, 2010, and we currently estimate that we will be required to make contributions to our funded U.S. pension plans of approximately $200 million to $225 million in 2011, and $400 million to $450 million in 2012. The current underfunded status of our pension plans will, and a further material increase in the underfunded status of the plans would, significantly increase our required contributions and pension expense, which could impair our ability to achieve or sustain future profitability.

We face significant global competition and our market share could decline.

New tires are sold under highly competitive conditions throughout the world. We compete with other tire manufacturers on the basis of product design, performance, price and terms, reputation, warranty terms, customer service and consumer convenience. On a worldwide basis, we have two major competitors, Bridgestone (based in Japan) and Michelin (based in France), that have large shares of the markets of the countries in which they are based and are aggressively seeking to maintain or improve their worldwide market share. Other significant competitors include Continental, Cooper, Hankook, Kumho, Pirelli, Toyo, Yokohama and various regional tire manufacturers. Our competitors produce significant numbers of tires in low-cost countries. Our ability to compete successfully will depend, in significant part, on our ability to continue to innovate and manufacture the types of tires demanded by consumers, and to reduce costs by such means as reducing excess and high-cost capacity, leveraging global purchasing, improving productivity, eliminating redundancies and increasing production at low-cost supply sources. If we are unable to compete successfully, our market share may decline, materially adversely affecting our results of operations and financial condition.

Our long term ability to meet our obligations and to repay maturing indebtedness may be dependent on our ability to access capital markets in the future and to improve our operating results.

The adequacy of our liquidity depends on our ability to achieve an appropriate combination of operating improvements, financing from third parties and access to capital markets. We may need to undertake additional financing actions in the capital markets in order to ensure that our future liquidity requirements are addressed. These actions may include the issuance of additional debt or equity.

Our access to the capital markets cannot be assured and is dependent on, among other things, the ability and willingness of financial institutions to extend credit on terms that are acceptable to us, or to honor future draws on our existing lines of credit, and the degree of success we have in implementing our cost reduction plans and improving the results of our North American Tire segment. Future liquidity requirements, or our inability to access cash deposits or make draws on our lines of credit, also may make it necessary for us to incur additional debt. A substantial portion of our assets is subject to liens securing our indebtedness. As a result, we are limited in our ability to pledge our remaining assets as security for additional secured indebtedness.

Our inability to access the capital markets or incur additional debt in the future could have a material adverse effect on our liquidity and operations, and could require us to consider further measures, including deferring planned capital expenditures, reducing discretionary spending, selling additional assets and restructuring existing debt.

Financial difficulties, work stoppages, supply disruptions or economic conditions affecting our major OE customers, dealers or suppliers could harm our business.

The recovery from the recessionary economic conditions that existed in many parts of the world during 2008 and 2009, particularly in North America and Europe, has positively impacted our results of operations. However, global tire industry demand, while improving, continues to be below pre-recessionary levels in North America and remains hard to predict, especially for OE production.

Although sales to our OE customers account for less than 20% of our net sales, demand for our products by OE customers and production levels at our facilities are directly related to automotive vehicle production. We may experience future declines in sales volume due to declines in new vehicle sales, the discontinuation or sale of certain OE brands, platforms or programs, or weakness in the demand for replacement tires, which could result in us incurring under-absorbed fixed costs at our production facilities or slowing the rate at which we are able to recover those costs.

Automotive production can also be affected by labor relation issues, financial difficulties or supply disruptions. Our OE customers could experience production disruptions resulting from their own or supplier labor, financial or supply difficulties. Such events may cause an OE customer to reduce or suspend vehicle production. As a result, an OE customer could halt or significantly reduce purchases of our products, which would harm our results of operations, financial condition and liquidity.

In addition, the bankruptcy, restructuring or consolidation of one or more of our major OE customers, dealers or suppliers could result in the write-off of accounts receivable, a reduction in purchases of our products or a supply disruption to our facilities, which could negatively affect our results of operations, financial condition and liquidity.

Our capital expenditures may not be adequate to maintain our competitive position and may not be implemented in a timely or cost-effective manner.

Our capital expenditures are limited by our liquidity and capital resources and the amount we have available for capital spending is limited by the need to pay our other expenses and to maintain adequate cash reserves and borrowing capacity to meet unexpected demands that may arise. We believe that our ratio of capital expenditures to sales is lower than the comparable ratio for our principal competitors.

Productivity improvements through process re-engineering, design efficiency and manufacturing cost improvements may be required to offset potential increases in labor and raw material costs and competitive price pressures. In addition, as part of our strategy to increase the percentage of tires that are produced at our lower-cost production facilities and to increase our capacity to produce higher margin tires, we may need to modernize or expand our facilities. For example, we are currently undertaking significant expansion and modernization projects at our manufacturing facilities in Lawton, Oklahoma and Chile. We are also making a significant investment in a new manufacturing facility in China, which is scheduled to begin tire production in 2011.

We may not have sufficient resources to implement planned capital expenditures with minimal disruption to our existing manufacturing operations, or within desired time frames and budgets. Any disruption to our operations,

delay in implementing capital improvements or unexpected costs may materially adversely affect our business and results of operations.

If we are unable to make sufficient capital expenditures, or to maximize the efficiency of the capital expenditures we do make, we may be unable to achieve productivity improvements, which may harm our competitive position. In addition, plant modernizations may temporarily disrupt our manufacturing operations and lead to temporary increases in our costs.

If we fail to extend or renegotiate our primary collective bargaining contracts with our labor unions as they expire from time to time, or if our unionized employees were to engage in a strike or other work stoppage or interruption, our business, financial position, results of operations and liquidity could be materially adversely affected.

We are a party to collective bargaining contracts with our labor unions, which represent a significant number of our employees. Approximately 19,000 of our employees outside of the United States are covered by union contracts that have expired or are expiring in 2011 primarily in Brazil, France, Germany, Luxembourg, Poland, Turkey, and Venezuela. Although we believe that our relations with our employees are satisfactory, no assurance can be given that we will be able to successfully extend or renegotiate our collective bargaining agreements as they expire from time to time. If we fail to extend or renegotiate our collective bargaining agreements, if disputes with our unions arise, or if our unionized workers engage in a strike or other work stoppage or interruption, we could experience a significant disruption of, or inefficiencies in, our operations or incur higher labor costs, which could have a material adverse effect on our business, financial position, results of operations and liquidity.

We have a substantial amount of debt, which could restrict our growth, place us at a competitive disadvantage or otherwise materially adversely affect our financial health.

We have a substantial amount of debt. As of December 31, 2010, our debt (including capital leases) on a consolidated basis was approximately $4.7 billion. Our substantial amount of debt and other obligations could have important consequences. For example, it could:

- make it more difficult for us to satisfy our obligations;
- impair our ability to obtain financing in the future for working capital, capital expenditures, research and development, acquisitions or general corporate requirements;
- increase our vulnerability to general adverse economic and industry conditions;
- limit our ability to use operating cash flow in other areas of our business because we would need to dedicate a substantial portion of these funds for payments on our indebtedness;
- limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate; and
- place us at a competitive disadvantage compared to our competitors.

The agreements governing our debt, including our credit agreements, limit, but do not prohibit, us from incurring additional debt and we may incur a significant amount of additional debt in the future, including additional secured debt. If new debt is added to our current debt levels, our ability to satisfy our debt obligations may become more limited.

Our ability to make scheduled payments on, or to refinance, our debt and other obligations will depend on our financial and operating performance, which, in turn, is subject to our ability to implement our cost reduction initiatives and other strategies, prevailing economic conditions and certain financial, business and other factors beyond our control. If our cash flow and capital resources are insufficient to fund our debt service and other obligations, including required pension contributions, we may be forced to reduce or delay expansion plans and capital expenditures, sell material assets or operations, obtain additional capital or restructure our debt. We cannot assure you that our operating performance, cash flow and capital resources will be sufficient to pay our debt obligations when they become due. We cannot assure you that we would be able to dispose of material assets or operations or restructure our debt or other obligations if necessary or, even if we were able to take such actions, that we could do so on terms that are acceptable to us.

Any failure to be in compliance with any material provision or covenant of our debt instruments, or a material reduction in the borrowing base under our revolving credit facility, could have a material adverse effect on our liquidity and operations.

The indentures and other agreements governing our secured credit facilities, senior unsecured notes and our other outstanding indebtedness impose significant operating and financial restrictions on us. These restrictions may affect our ability to operate our business and may limit our ability to take advantage of potential business opportunities as they arise. These restrictions limit our ability to, among other things:

- incur additional debt or issue redeemable preferred stock;
- pay dividends or make certain other restricted payments or investments;
- incur liens;
- sell assets;
- incur restrictions on the ability of our subsidiaries to pay dividends to us;
- enter into affiliate transactions;
- engage in sale/leaseback transactions; and
- engage in certain mergers or consolidations or transfers of substantially all of our assets.

Availability under our first lien revolving credit facility is subject to a borrowing base, which is based on eligible accounts receivable and inventory. To the extent that our eligible accounts receivable and inventory decline, our borrowing base will decrease and the availability under that facility may decrease below its stated amount. In addition, if at any time the amount of outstanding borrowings and letters of credit under that facility exceeds the borrowing base, we are required to prepay borrowings and/or cash collateralize letters of credit sufficient to eliminate the excess.

Our ability to comply with these covenants or to maintain our borrowing base may be affected by events beyond our control, including deteriorating economic conditions, and these events could require us to seek waivers or amendments of covenants or alternative sources of financing or to reduce expenditures. We cannot assure you that such waivers, amendments or alternative financing could be obtained, or if obtained, would be on terms acceptable to us.

A breach of any of the covenants or restrictions contained in any of our existing or future financing agreements, including the financial covenants in our secured credit facilities, could result in an event of default under those agreements. Such a default could allow the lenders under our financing agreements, if the agreements so provide, to discontinue lending, to accelerate the related debt as well as any other debt to which a cross-acceleration or cross-default provision applies, and/or to declare all borrowings outstanding thereunder to be due and payable. In addition, the lenders could terminate any commitments they have to provide us with further funds. If any of these events occur, we cannot assure you that we will have sufficient funds available to pay in full the total amount of obligations that become due as a result of any such acceleration, or that we will be able to find additional or alternative financing to refinance any such accelerated obligations. Even if we obtain additional or alternative financing, we cannot assure you that it would be on terms that would be acceptable to us.

We cannot assure you that we will be able to remain in compliance with the covenants to which we are subject in the future and, if we fail to do so, that we will be able to obtain waivers from our lenders or amend the covenants.

Our international operations have certain risks that may materially adversely affect our operating results, financial condition and liquidity.

We have manufacturing and distribution facilities throughout the world. Our international operations are subject to certain inherent risks, including:

- exposure to local economic conditions;
- adverse changes in the diplomatic relations of foreign countries with the United States;
- hostility from local populations and insurrections;
- adverse currency exchange controls;
- withholding taxes and restrictions on the withdrawal of foreign investment and earnings;
- labor regulations;

- expropriations of property;
- the potential instability of foreign governments;
- risks of renegotiation or modification of existing agreements with governmental authorities;
- export and import restrictions; and
- other changes in laws or government policies.

The likelihood of such occurrences and their potential effect on us vary from country to country and are unpredictable. Certain regions, including Latin America, Asia, the Middle East and Africa, are inherently more economically and politically volatile and as a result, our business units that operate in these regions could be subject to significant fluctuations in sales and operating income from quarter to quarter. Because a significant percentage of our operating income in recent years has come from these regions, adverse fluctuations in the operating results in these regions could have a disproportionate impact on our results of operations in future periods.

For example, since 2003, Venezuela has imposed currency exchange controls that fix the exchange rate between the Venezuelan bolivar fuerte and the U.S. dollar and restrict the ability to exchange bolivares fuertes for dollars. These restrictions have delayed and limited our ability to pay third-party and affiliated suppliers and to otherwise repatriate funds from Venezuela, and may continue to do so, which could materially adversely affect our financial condition and liquidity. In addition, if we are unable to pay these suppliers in a timely manner, they may cease supplying us. Venezuela has also imposed restrictions on the importation of certain raw materials. If these suppliers cease supplying us or we are unable to import necessary raw materials, we may need to reduce or halt production in Venezuela, which could materially adversely affect our results of operations.

On January 8, 2010, Venezuela established a two-tier exchange rate structure for essential and non-essential goods. For essential goods the official exchange rate was 2.6 bolivares fuertes to the U.S. dollar and for non-essential goods the official exchange rate was 4.3 bolivares fuertes to the U.S. dollar. As announced by the Venezuelan government in December 2010, on January 1, 2011, the two-tier exchange rate structure was eliminated and the official exchange rate for essential goods cannot be used for our unsettled amounts at December 31, 2010. Effective January 1, 2011, the official exchange rate of 4.3 bolivares fuertes to the U.S. dollar was established for substantially all goods.

The future results of our Venezuelan operations will be affected by many factors, including our ability to take actions to mitigate the effect of the devaluations, further actions of the Venezuelan government, economic conditions in Venezuela such as inflation and consumer spending, and the availability of raw materials, utilities and energy. Goodyear Venezuela contributes a significant portion of the sales and operating income of our Latin American Tire segment. As a result, any disruption of Goodyear Venezuela's operations or of our ability to pay suppliers or repatriate funds from Venezuela could have a material adverse impact on the future performance of our Latin American Tire segment and could materially adversely affect our results of operations, financial condition and liquidity.

For further information regarding our operations in Venezuela, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Overview."

We have foreign currency translation and transaction risks that may materially adversely affect our operating results.

The financial position and results of operations of our international subsidiaries are initially recorded in various foreign currencies and then translated into U.S. dollars at the applicable exchange rate for inclusion in our financial statements. The strengthening of the U.S. dollar against these foreign currencies ordinarily has a negative impact on our reported sales and operating margin (and conversely, the weakening of the U.S. dollar against these foreign currencies has a positive impact). For the year ended December 31, 2010, foreign currency translation unfavorably affected sales by $12 million and unfavorably affected segment operating income by $45 million compared to the year ended December 31, 2009. The volatility of currency exchange rates may materially adversely affect our operating results.

Our variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.

Certain of our borrowings are at variable rates of interest and expose us to interest rate risk. If interest rates increase, our debt service obligations on the variable rate indebtedness would increase even though the amount borrowed remained the same, which would require us to use more of our available cash to service our indebtedness. There can be no assurance that we will be able to enter into swap agreements or other hedging arrangements in the future, or that existing or future hedging arrangements will offset increases in interest rates. As of December 31, 2010, we had approximately $2.0 billion of variable rate debt outstanding.

We have substantial fixed costs and, as a result, our operating income fluctuates disproportionately with changes in our net sales.

We operate with significant operating and financial leverage. Significant portions of our manufacturing, selling, administrative and general expenses are fixed costs that neither increase nor decrease proportionately with sales. In addition, a significant portion of our interest expense is fixed. There can be no assurance that we would be able to reduce our fixed costs proportionately in response to a decline in our net sales and therefore our competitiveness could be significantly impacted. As a result, a decline in our net sales would result in a higher percentage decline in our income from operations and net income.

We may incur significant costs in connection with asbestos claims.

We are among many defendants named in legal proceedings involving claims of individuals relating to alleged exposure to asbestos. At December 31, 2010, approximately 83,700 claims were pending against us alleging various asbestos-related personal injuries purported to have resulted from alleged exposure to asbestos in certain rubber encapsulated products or aircraft braking systems manufactured by us in the past or to asbestos in certain of our facilities. We expect that additional claims will be brought against us in the future. Our ultimate liability with respect to such pending and unasserted claims is subject to various uncertainties, including the following:

- the number of claims that are brought in the future;
- the costs of defending and settling these claims;
- the risk of insolvencies among our insurance carriers;
- the possibility that adverse jury verdicts could require us to pay damages in amounts greater than the amounts for which we have historically settled claims;
- the risk of changes in the litigation environment or Federal and state law governing the compensation of asbestos claimants; and
- the risk that the bankruptcies of other asbestos defendants may increase our costs.

Because of the uncertainties related to such claims, it is possible that we may incur a material amount of cost in excess of our current reserve for such claims. In addition, if any of the foregoing risks were to materialize, the resulting costs could have a material adverse impact on our liquidity, financial position and results of operations in future periods. For further information regarding our asbestos liabilities, refer to the Note to the Consolidated Financial Statements, No. 19, Commitments and Contingent Liabilities.

We may be required to provide letters of credit or post cash collateral if we are subject to a significant adverse judgment or if we are unable to obtain surety bonds, which may have a material adverse effect on our liquidity.

We are subject to various legal proceedings. If we wish to appeal any future adverse judgment in any of these proceedings, we may be required to post an appeal bond with the relevant court. In that case, we may be required to issue a letter of credit to the surety posting the bond. We may issue up to an aggregate of $800 million in letters of credit under our $1.5 billion U.S. senior secured first lien credit facility. As of December 31, 2010, we had $474 million in letters of credit issued and $1,001 million of remaining availability under this facility. If we are subject to a significant adverse judgment and do not have sufficient availability under our credit facilities to issue a letter of credit to support an appeal bond, we may be required to pay down borrowings under the facilities or deposit

cash collateral in order to stay the enforcement of the judgment pending an appeal. If we are unable to post cash collateral, we may be unable to stay enforcement of the judgment.

Under standard terms in the surety market, sureties issue or continue bonds on a case-by-case basis and can decline to issue bonds at any time or require the posting of collateral as a condition to issuing or renewing any bonds. If surety providers were to limit or eliminate our access to bonding, we would need to post other forms of collateral, such as letters of credit or cash. As described above, we may be unable to secure sufficient letters of credit under our credit facilities.

If we were subject to a significant adverse judgment or experienced an interruption or reduction in the availability of bonding capacity, we may be required to provide letters of credit or post cash collateral, which may have a material adverse effect on our liquidity.

We are subject to extensive government regulations that may materially adversely affect our operating results.

We are subject to regulation by the Department of Transportation through the National Highway Traffic Safety Administration, or NHTSA, which has established various standards and regulations applicable to tires sold in the United States and tires sold in a foreign country that are identical or substantially similar to tires sold in the United States. NHTSA has the authority to order the recall of automotive products, including tires, having safety-related defects.

The Transportation Recall Enhancement, Accountability, and Documentation Act, or TREAD Act, imposes numerous requirements with respect to the early warning reporting of warranty claims, property damage claims, and bodily injury and fatality claims and also requires tire manufacturers, among other things, to conform with revised and more rigorous tire testing standards. Compliance with the TREAD Act regulations has increased, and will continue to increase, the cost of producing and distributing tires in the United States. In addition, while we believe that our tires are free from design and manufacturing defects, it is possible that a recall of our tires, under the TREAD Act or otherwise, could occur in the future. A substantial recall could have a material adverse effect on our reputation, operating results and financial position.

In addition, as required by the Energy Independence and Security Act of 2007, NHTSA will establish a national tire fuel efficiency consumer information program. When the related rule-making process is completed, certain tires sold in the United States will be required to be rated for rolling resistance, traction and tread wear. While the Federal law will pre-empt state tire fuel efficiency laws adopted after January 1, 2006, we may become subject to additional tire fuel efficiency legislation, either in the United States or other countries.

Our European operations are subject to regulation by the European Union. In 2009, two important regulations, the Tire Safety Regulation and the Tire Labeling Regulation, applicable to tires sold in the European Union were adopted. The Tire Safety Regulation sets performance standards that tires for cars and light and commercial trucks need to meet for rolling resistance, wet grip braking and noise in order to be sold in the European Union, and will become effective between 2012 and 2020. The Tire Labeling Regulation applies to all car and light and commercial truck tires produced after July 1, 2012 and requires that tires be labeled to inform consumers about the tire's fuel efficiency, wet grip and noise characteristics. For both of these regulations, additional implementing rules are being developed and are expected to be finalized by the end of 2011.

Tires produced or sold in Europe also have to comply with various other standards, including environmental laws such as REACH (Registration, Evaluation, Authorisation and Restriction of Chemical substances), which regulates the use of chemicals in the European Union. For example, since January 1, 2010, REACH has prohibited the use of highly aromatic oils in tires, which were used as compounding components to improve certain safety-related performance characteristics, such as grip.

These U.S. and European regulations, rules adopted to implement these regulations, or other similar regulations that may be adopted in the United States, Europe or elsewhere in the future may require us to alter or increase our capital spending and research and development plans or cease the production of certain tires, which could have a material adverse affect on our operating results.

Laws and regulations governing environmental and occupational safety and health are complicated, change frequently and have tended to become stricter over time. As a manufacturing company, we are subject to these laws and regulations both inside and outside the United States. We may not be in complete compliance with such laws and regulations at all times. Our costs or liabilities relating to them may be more than the amount we have reserved, and that difference may be material.

In addition, our manufacturing facilities may become subject to further limitations on the emission of "greenhouse gases" due to public policy concerns regarding climate change issues or other environmental or health and safety concerns. While the form of any additional regulations cannot be predicted, a "cap-and-trade" system similar to the one adopted in the European Union could be adopted in the United States. Any such "cap-and-trade" system (including the system currently in place in the European Union) or other limitations imposed on the emission of "greenhouse gases" could require us to increase our capital expenditures, use our cash to acquire emission credits or restructure our manufacturing operations, which could have a material adverse affect on our operating results, financial condition and liquidity.

Compliance with the laws and regulations described above or any of the myriad of applicable foreign, Federal, state and local laws and regulations currently in effect or that may be adopted in the future could materially adversely affect our competitive position, operating results, financial condition and liquidity.

The terms and conditions of our global alliance with Sumitomo Rubber Industries, Ltd. provide for exit rights available to SRI upon the occurrence of certain events, which could require us to make a substantial payment to acquire SRI's interest in our European and North American joint ventures.

Under the global alliance agreements between us and SRI, SRI has the right to require us to purchase its ownership interests in GDTE and GDTNA if certain triggering events have occurred, including certain bankruptcy events, changes in control of Goodyear or breaches of the global alliance agreements. While we have not done any current valuation of these businesses, any payment required to be made to SRI pursuant to an exit under the terms of the global alliance agreements could be substantial. We cannot assure you that our operating performance, cash flow and capital resources would be sufficient to make such a payment or, if we were able to make the payment, that there would be sufficient funds remaining to satisfy our other obligations. The withdrawal of SRI from the global alliance could also have other adverse effects on our business, including the loss of technology and purchasing synergies. For further information regarding our global alliance with SRI, including the events that could trigger SRI's exit rights, see "Item 1. Business. Description of Goodyear's Business — Global Alliance."

If we are unable to attract and retain key personnel our business could be materially adversely affected.

Our business substantially depends on the continued service of key members of our management. The loss of the services of a significant number of members of our management could have a material adverse effect on our business. Our future success will also depend on our ability to attract and retain highly skilled personnel, such as engineering, marketing and senior management professionals. Competition for these employees is intense, and we could experience difficulty from time to time in hiring and retaining the personnel necessary to support our business. If we do not succeed in retaining our current employees and attracting new high quality employees, our business could be materially adversely affected.

We may be impacted by economic and supply disruptions associated with events beyond our control, such as war, acts of terror, political unrest, public health concerns, labor disputes or natural disasters.

We manage businesses and facilities worldwide. Our facilities and operations, and the facilities and operations of our suppliers and customers, could be disrupted by events beyond our control, such as war, acts of terror, political unrest, public health concerns, labor disputes or natural disasters. Any such disruption could cause delays in the production and distribution of our products and the loss of sales and customers. We may not be insured against all such potential losses and, if insured, the insurance proceeds that we receive may not adequately compensate us for all of our losses.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

We manufacture our products in 56 manufacturing facilities located around the world including 17 plants in the United States.

NORTH AMERICAN TIRE MANUFACTURING FACILITIES. North American Tire owns (or leases with the right to purchase at a nominal price) and operates 20 manufacturing facilities in the United States and Canada.

- 10 tire plants (8 in the United States and 2 in Canada),
- 1 steel tire wire cord plant,
- 4 chemical plants,
- 1 tire mold plant,
- 1 tire retread plant,
- 2 aviation retread plants, and
- 1 mix plant in Canada.

These facilities have floor space aggregating approximately 24 million square feet.

EUROPE, MIDDLE EAST AND AFRICA TIRE MANUFACTURING FACILITIES. Europe, Middle East and Africa Tire owns and operates 20 manufacturing facilities in 9 countries, including:

- 16 tire plants,
- 1 steel tire wire cord plant,
- 1 tire mold and tire manufacturing machines facility,
- 1 aviation retread plant, and
- 1 mix plant.

These facilities have floor space aggregating approximately 20 million square feet.

LATIN AMERICAN TIRE MANUFACTURING FACILITIES. Latin American Tire owns and operates 8 manufacturing facilities in 5 countries, including 6 tire plants, 1 tire retread plant, and 1 aviation retread plant. These facilities have floor space aggregating approximately 6 million square feet.

ASIA PACIFIC TIRE MANUFACTURING FACILITIES. Asia Pacific Tire owns and operates 8 manufacturing facilities in 6 countries, including 7 tire plants and 1 aviation retread plant. These facilities have floor space aggregating approximately 5 million square feet.

PLANT UTILIZATION. Our worldwide tire capacity utilization rate was approximately 88% during 2010 compared to approximately 73% in 2009 and 78% in 2008. Our 2010 utilization improved due to increased production in response to increased demand as the global economy began to recover from the recessionary conditions that existed in 2009 and 2008.

OTHER FACILITIES. We also own and operate three research and development facilities and technical centers, and three tire proving grounds. We also operate approximately 1,500 retail outlets for the sale of our tires to consumer and commercial customers, approximately 50 tire retreading facilities and approximately 150 warehouse distribution facilities. Substantially all of these facilities are leased. We do not consider any one of these leased properties to be material to our operations. For additional information regarding leased properties, refer to the Notes to the Consolidated Financial Statements No. 9, Property, Plant and Equipment and No. 10, Leased Assets.

ITEM 3. LEGAL PROCEEDINGS.

Asbestos Litigation

We are currently one of numerous defendants in legal proceedings in certain state and Federal courts involving approximately 83,700 claimants at December 31, 2010 relating to their alleged exposure to materials containing asbestos in products allegedly manufactured by us or asbestos materials present at our facilities. We manufactured,

among other things, rubber coated asbestos sheet gasket materials from 1914 through 1973 and aircraft brake assemblies containing asbestos materials prior to 1987. Some of the claimants are independent contractors or their employees who allege exposure to asbestos while working at certain of our facilities. It is expected that in a substantial portion of these cases there will be no evidence of exposure to a Goodyear manufactured product containing asbestos or asbestos in our facilities. The amount expended by us and our insurers on defense and claim resolution was approximately $26 million during 2010. The plaintiffs in the pending cases allege that they were exposed to asbestos and, as a result of such exposure suffer from various respiratory diseases, including in some cases mesothelioma and lung cancer. The plaintiffs are seeking unspecified actual and punitive damages and other relief. For additional information on asbestos litigation, refer to the Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities.

Marine Hose Investigation

In May 2007, the United States Department of Justice, Antitrust Division, announced that it had executed search and arrest warrants against a number of companies and their executives in connection with an investigation into allegations of price fixing in the marine hose industry. We received a grand jury document subpoena in May 2007 relating to that investigation. We have also received a similar request for information from European antitrust authorities in connection with a similar investigation of the marine hose industry in Europe. In addition, in November 2007, the Brazilian antitrust authority notified Goodyear's Brazilian subsidiary that it was a party to a civil investigation into alleged anticompetitive practices in the marine hose industry in Brazil. Based on our review, we continue to believe Goodyear and its subsidiaries did not engage in unlawful conduct which is the subject of the investigations described above. None of Goodyear's executives has been named in any criminal complaint; and no arrest or search warrants have been executed against any of our executives or at any of our facilities in connection with these investigations. We are cooperating with U.S., European and Brazilian authorities.

South African Competition Tribunal Proceedings

On August 31, 2010, the South African Competition Commission referred a complaint to the South African Competition Tribunal alleging that Goodyear South Africa (Pty) Ltd., Apollo Tyres South Africa (Pty) Ltd., Continental Tyre South Africa (Pty) Ltd., Bridgestone South Africa (Pty) Ltd., and the South African Tyre Manufacturers Conference (Pty) Ltd. engaged in anti-competitive conduct in the tire market in South Africa in violation of the South African Competition Act. The Competition Commission is seeking a penalty of approximately $30 million, which is based on a percentage of Goodyear South Africa's annual revenues in 2008. Goodyear South Africa has conducted an internal investigation regarding these allegations and intends to defend itself before the Competition Tribunal.

Brazilian Tax Assessment

In December 2010, the State of Sao Paulo, Brazil issued assessments to us for improperly taking tax credits for value-added taxes paid to certain natural rubber processing companies from January 2006 to October 2009. The assessments, including interest and penalties, total approximately $51 million. We have filed a response contesting the assessments and are defending this matter.

Other Matters

In addition to the legal proceedings described above, various other legal actions, claims and governmental investigations and proceedings covering a wide range of matters are pending against us, including claims and proceedings relating to several waste disposal sites that have been identified by the United States Environmental Protection Agency and similar agencies of various states for remedial investigation and cleanup, which sites were allegedly used by us in the past for the disposal of industrial waste materials. Based on available information, we do not consider any such action, claim, investigation or proceeding to be material, within the meaning of that term as used in Item 103 of Regulation S-K and the instructions thereto. For additional information regarding our legal proceedings, refer to the Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities.

PART II.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

The principal market for our common stock is the New York Stock Exchange (Stock Exchange Symbol: GT).

Information relating to the high and low sale prices of shares of our common stock appears under the caption "Quarterly Data and Market Price Information" in Item 8 of this Annual Report at page 124, and is incorporated herein by reference. Under our primary credit facilities we are permitted to pay dividends on our common stock as long as no default will have occurred and be continuing, additional indebtedness can be incurred under the credit facilities following the payment, and certain financial tests are satisfied. We have not declared any cash dividends in the three most recent fiscal years. At December 31, 2010, there were 20,466 record holders of the 242,938,949 shares of our common stock then outstanding.

The following table presents information with respect to repurchases of common stock made by us during the three months ended December 31, 2010. These shares, if any, are delivered to us by employees as payment for the exercise price of stock options as well as the withholding taxes due upon the exercise of the stock options or the vesting or payment of stock awards.

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
10/1/10-10/31/10	1,609	$10.93	—	—
11/1/10-11/30/10	—	—	—	—
12/1/10-12/31/10	2,550	11.98	—	—
Total	4,159	$11.58	—	—

Set forth in the table below is certain information regarding the number of shares of our common stock that were subject to outstanding stock options or other compensation plan grants and awards at December 31, 2010.

EQUITY COMPENSATION PLAN INFORMATION

Plan Category	Number of Shares to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Shares Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Shares Reflected in Column (a)) (c)
Equity compensation plans approved by shareholders	14,113,240	$15.13	9,461,817(1)
Equity compensation plans not approved by shareholders(2)(3)	63,585	$11.19	—
Total	14,176,825	$15.11	9,461,817

(1) Under our equity-based compensation plans, up to a maximum of 1,341,618 performance shares in respect of performance periods ending on or subsequent to December 31, 2010, and 415,237 shares of time-vested restricted stock have been awarded. In addition, up to 56,423 shares of common stock may be issued in respect of the deferred payout of awards made under our equity compensation plans. The number of performance shares indicated assumes the maximum possible payout that may be earned during the relevant performance periods.

(2) Our Stock Option Plan for Hourly Bargaining Unit Employees at Designated Locations provided for the issuance of stock options to employees represented by the USW at various manufacturing plants. Options in respect of 36,380 shares of common stock were granted on September 3, 2001, each having an exercise price of $25.03 per share. Each option has a term of ten years and was subject to certain vesting requirements over a two-year period. No additional options may be granted under this Plan, which expired September 30, 2001 except with respect to options then outstanding.

(3) Our Hourly and Salaried Employees Stock Option Plan provided for the issuance of stock options to selected hourly and non-executive salaried employees of Goodyear and its subsidiaries. Options in respect of 294,690 shares of common stock were granted on September 30, 2002, each having an exercise price of $8.82 per share. Each option granted has a ten-year term and was subject to certain vesting requirements. No additional options may be granted under this Plan, which expired December 31, 2002 except with respect to options then outstanding.

ITEM 6. SELECTED FINANCIAL DATA.

(In millions, except per share amounts)	Year Ended December 31,(1) 2010(2)	2009(3)	2008(4)	2007(5)	2006(6)
Net Sales	$18,832	$16,301	$19,488	$19,644	$18,751
Income (Loss) from Continuing Operations	$ (164)	$ (364)	$ (23)	$ 190	$ (280)
Discontinued Operations	—	—	—	463	43
Net Income (Loss)	(164)	(364)	(23)	653	(237)
Less: Minority Shareholders' Net Income	52	11	54	70	111
Goodyear Net Income (Loss)	$ (216)	$ (375)	$ (77)	$ 583	$ (348)
Goodyear Income (Loss) Per Share — Basic:					
Income (Loss) from Continuing Operations	$ (0.89)	$ (1.55)	$ (0.32)	$ 0.60	$ (2.21)
Discontinued Operations	—	—	—	2.30	0.25
Goodyear Net Income (Loss) Per Share — Basic	$ (0.89)	$ (1.55)	$ (0.32)	$ 2.90	$ (1.96)
Goodyear Income (Loss) Per Share — Diluted:					
Income (Loss) from Continuing Operations	$ (0.89)	$ (1.55)	$ (0.32)	$ 0.59	$ (2.21)
Discontinued Operations	—	—	—	2.25	0.25
Goodyear Net Income (Loss) Per Share — Diluted	$ (0.89)	$ (1.55)	$ (0.32)	$ 2.84	$ (1.96)
Total Assets	$15,630	$14,410	$15,226	$17,191	$17,022
Long Term Debt and Capital Leases Due Within One Year	188	114	582	171	405
Long Term Debt and Capital Leases	4,319	4,182	4,132	4,329	6,538
Goodyear Shareholders' Equity (Deficit)	644	735	1,022	2,850	(741)
Total Shareholders' Equity (Deficit)	921	986	1,253	3,150	(487)
Dividends Per Share	—	—	—	—	—

(1) Refer to "Basis of Presentation" and "Principles of Consolidation" in the Note to the Consolidated Financial Statements No. 1, Accounting Policies.

(2) Goodyear net loss in 2010 included net after-tax charges of $445 million, or $1.84 per share — diluted, due to rationalization charges, including accelerated depreciation and asset write-offs; the devaluation of the Venezuelan bolivar fuerte against the U.S. dollar; charges related to the early redemption of debt and the debt exchange offer; charges related to the disposal of a building in the Philippines; a one-time importation cost adjustment; supplier disruption costs; a charge related to a claim regarding the use of value-added tax credits in prior periods; and charges related to a strike in South Africa. Goodyear net loss in 2010 also included after-tax benefits of $104 million, or $0.43 per share — diluted, from gains on asset sales; favorable settlements with suppliers; an insurance recovery; and the benefit of certain tax adjustments.

(3) Goodyear net loss in 2009 included net after-tax charges of $277 million, or $1.16 per share — diluted, due to rationalization charges, including accelerated depreciation and asset write-offs; asset sales; the liquidation of our subsidiary in Guatemala; a legal reserve for a closed facility; and our USW labor contract. Goodyear net loss in 2009 also included after-tax benefits of $156 million, or $0.65 per share — diluted, due to non-cash tax benefits related to losses from our U.S. operations; benefits primarily resulting from certain income tax items including the release of the valuation allowance on our Australian operations and the settlement of our 1997 through 2003 Competent Authority claim between the United States and Canada; and the recognition of insurance proceeds related to the settlement of a claim as a result of a fire at our manufacturing facility in Thailand.

(4) Goodyear net loss in 2008 included net after-tax charges of $311 million, or $1.29 per share — diluted, due to rationalization charges, including accelerated depreciation and asset write-offs; costs related to the redemption

of long-term debt; write-offs of deferred debt issuance costs associated with refinancing and redemption activities; general and product liability — discontinued products; VEBA-related charges; charges related to Hurricanes Ike and Gustav; losses from the liquidation of our subsidiary in Jamaica; charges related to the exit of our Moroccan business; and the valuation allowance on our investment in The Reserve Primary Fund. Goodyear net loss in 2008 also included after-tax benefits of $68 million, or $0.28 per share — diluted, from asset sales; settlements with suppliers; and the benefit of certain tax adjustments.

(5) Goodyear net income in 2007 included a net after-tax gain of $508 million, or $2.48 per share — diluted, related to the sale of our Engineered Products business. Goodyear net income in 2007 also included net after-tax charges of $332 million, or $1.62 per share — diluted, due to curtailment and settlement charges related to our pension plans; asset sales, including the assets of North American Tire's tire and wheel assembly operation; costs related to the redemption and conversion of long term debt; write-offs of deferred debt issuance costs associated with refinancing, redemption and conversion activities; rationalization charges, including accelerated depreciation and asset write-offs; and the impact of the USW strike. Of these amounts, discontinued operations in 2007 included net after-tax charges of $90 million, or $0.44 per share — diluted, due to curtailment and settlement charges related to pension plans; rationalization charges; and costs associated with the USW strike.

(6) Goodyear net loss in 2006 included net after-tax charges of $804 million, or $4.54 per share — diluted, due to the impact of the USW strike; rationalization charges, accelerated depreciation and asset write-offs; and general and product liability — discontinued products. Goodyear net loss in 2006 included net after-tax benefits of $283 million, or $1.60 per share — diluted, from certain tax adjustments; settlements with raw material suppliers; asset sales; and increased estimated useful lives of our tire mold equipment. Of these amounts, discontinued operations in 2006 included net after-tax charges of $56 million, or $0.32 per share — diluted due to the impact of the USW strike and rationalization charges, accelerated depreciation and asset write-offs, and net after-tax benefits of $16 million, or $0.09 per share — diluted, from settlements with raw material suppliers.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

OVERVIEW

The Goodyear Tire & Rubber Company is one of the world's leading manufacturers of tires, with one of the most recognizable brand names in the world and operations in most regions of the world. We have a broad global footprint with 56 manufacturing facilities in 22 countries, including the United States. We operate our business through four operating segments representing our regional tire businesses: North American Tire; Europe, Middle East and Africa Tire ("EMEA"); Latin American Tire; and Asia Pacific Tire.

We faced an uncertain business environment in 2010 as the global economy continued its recovery from the recessionary economic conditions that existed in many parts of the world during 2008 and 2009, particularly in North America and Europe. We also faced a number of substantial challenges, such as rapidly rising raw material and energy costs, wage inflation in emerging markets, continued pressure from our unfunded pension obligations, and the devaluation of the currency and economic weakness in Venezuela. Global tire industry demand, while improving, continues to be below pre-recessionary levels in North America and remains hard to predict, especially for OE production.

For the year ended December 31, 2010, Goodyear net loss was $216 million, compared to a Goodyear net loss of $375 million in 2009. Our total segment operating income for 2010 was $917 million, compared to $372 million in 2009. The increase in segment operating income was due primarily to a significant decrease in under-absorbed fixed overhead costs, an increase in tire volume and strong price and product mix which more than offset raw material costs. See "Results of Operations — Segment Information" for additional information.

Net sales were $18.8 billion in 2010, compared to $16.3 billion in 2009. Net sales increased due to higher tire volume, primarily in North American Tire and EMEA, an increase in other tire-related businesses, primarily in North American Tire's third party sales of chemical products, and improved product mix.

We acted to address the uncertain economic environment and the challenges described above by implementing strategic initiatives aimed at permitting us to take advantage of improving economic conditions and to emerge stronger in the future. Under those strategic initiatives we planned to:

- Continue to focus on consumer-driven product development by launching a significant number of new and innovative products;
- Take a selective approach to the market, targeting profitable segments where we have competitive advantage;
- Focus on price and product mix improvements to address rising raw material costs;
- Achieve cost reductions of $1.0 billion over three years from 2010 to 2012;
- Reduce our high-cost capacity by 15 to 25 million units;
- Focus on cash flow to provide funding for investments in future growth;
- Create an advantaged supply chain focused on optimizing inventory levels and further improving customer service; and
- Improve our manufacturing efficiency, including recovering unabsorbed fixed costs incurred during the recession.

We met, and frequently exceeded, our financial and operating goals for 2010, including the following key achievements:

- Nearly 60 successful new product launches thereby increasing the percentage of our sales coming from recently launched products;

- Price and product mix improvements of $689 million, which helped to offset $685 million of raw material cost increases, exclusive of approximately $136 million of raw material cost savings included in our cost savings described below;
- Cost savings of $467 million, which included savings from continuous improvement initiatives, including savings under our USW agreement, increased low-cost country sourcing, and initiatives to reduce raw material costs and selling, administrative and general expense;
- Recovery of unabsorbed fixed costs of approximately $278 million compared to 2009;
- Continued progress on actions to reduce our high-cost manufacturing capacity, including the announced closure of our factory in Union City, Tennessee, which brings our announced manufacturing capacity reductions to approximately 21 million units and will achieve our goal of reducing high-cost capacity by 15 to 25 million units;
- Significant progress on manufacturing investments in Oklahoma, Chile and China;
- Further improvements in working capital through strong inventory management, improved vendor terms and good collections at year-end; and
- The successful completion of a $1.0 billion debt offering in August 2010 that addressed our 2011 debt maturities and further enhanced our liquidity position.

Pension and Benefit Plans

During 2010, our U.S. pension fund experienced market gains, which increased plan assets by $473 million and decreased net actuarial losses included in Accumulated Other Comprehensive Loss ("AOCL") by $193 million. As a result, annual U.S. net periodic pension cost will decrease to approximately $175 million to $200 million in 2011 from $219 million in 2010, due primarily to expected returns on higher plan assets.

Liquidity

At December 31, 2010, we had $2,005 million in Cash and cash equivalents as well as $2,475 million of unused availability under our various credit agreements, compared to $1,922 million and $2,567 million, respectively, at December 31, 2009. Cash and cash equivalents were favorably affected by the reduced net loss compared to 2009, improvements in trade working capital of $52 million and proceeds from the issuance of our $1.0 billion 8.25% senior notes due 2020. Partially offsetting these increases in Cash and cash equivalents were capital expenditures of $944 million and the redemption of $973 million of outstanding notes, including $713 million of notes due in 2011 and $260 million of notes due in 2015.

We believe that our liquidity position is adequate to fund our operating and investing needs in 2011 and to provide us with flexibility to respond to further changes in the business environment.

New Products

In 2010, we successfully launched our new Goodyear Assurance ComforTred Touring tire in North American Tire. We also announced the launch of 12 new and retread product lines in our commercial truck tire business with seven of those lines featuring Fuel Max and Duraseal Technology. At our North American Tire dealer conference in early 2011, we introduced several key products, most notably the Goodyear Assurance TripleTred All Season tire and our new Eagle F1 Asymmetric 2 tire. Additionally, we are adding key sizes of new consumer products launched in recent years.

In Europe, Middle East and Africa Tire, we introduced the Dunlop StreetResponse and the QuatroMaxx. We also introduced the UG Ice + targeting the Nordic and Russian markets. In addition, we launched our Goodyear Fuel Max Trailer tires.

In Latin American Tire, we successfully developed the Fuel Max Technology for consumer through the GPS Duraplus product line. We also introduced the Eagle Excellence with Aquamax Technology and the Viva product line. The new G665 Plus for city service applications was introduced in the commercial line.

In Asia Pacific Tire, we launched the Eagle EfficientGrip and Assurance Fuel Max tires and re-launched the Wrangler AT/SA with improved wear performance to meet the demand of the growing SUV segment.

Outlook

We expect 2011 to be a year of continued recovery. We will face challenges related primarily to raw material costs and the significant actions we are taking globally to improve our manufacturing footprint.

We expect the global tire industry to continue to grow in 2011, with volume expansion across all regions and major segments. In North America, consumer replacement is expected to grow between 1% and 3%, consumer OE between 5% and 10%, commercial replacement between 3% and 8% and commercial OE between 20% and 30%. We anticipate our North American consumer OE volumes will increase at less than the industry rate, given actions we have taken to be more selective in our OE fitments. In Europe, consumer replacement is expected to grow between 1% and 3%, consumer OE between 0% and 5%, commercial replacement between 5% and 10% and commercial OE between 30% and 40%. Overall, we expect our unit sales will increase by 3% to 5% in 2011 as we continue to grow in targeted segments.

We expect our raw material costs in the first quarter of 2011 to increase 25% to 30% when compared with the first quarter of 2010. Similar increases are expected for the second quarter of 2011 compared with the second quarter of 2010. We expect raw material costs to peak in the third quarter of 2011. In order to mitigate some of the impact of rapidly rising natural rubber prices, we are continuing to focus on price and product mix, to substitute synthetic rubber for natural rubber where possible and to work to identify additional substitution opportunities, to reduce the amount of natural rubber required in each tire, and to pursue alternative raw materials including innovative bio-based materials. However, during periods of rapidly rising raw material costs, we may not be able to fully offset those raw material cost increases through the use of these strategies, although we remain confident in our ability to do so over the longer term.

We expect unabsorbed fixed cost recovery and our cost savings program to contribute approximately $1.0 billion to our operating results in 2011 and 2012 compared to 2010. As a result of increased production and our planned manufacturing footprint reductions in Tennessee and France, we expect to recover approximately $175 million of unabsorbed fixed costs in 2011 and approximately $295 million in 2012. We also expect to reduce costs by more than $500 million in 2011 and 2012, with approximately half of the savings realized in each year. As a partial offset to these benefits, we expect to incur approximately $30 million to $40 million of additional costs related to start-up expenses for our new manufacturing facility in China in 2011.

See "Item 1A. Risk Factors" at page 13 for a discussion of the factors that may impact our business, results of operations, financial condition or liquidity and "Forward-Looking Information — Safe Harbor Statement" at page 56 for a discussion of our use of forward-looking statements.

RESULTS OF OPERATIONS — CONSOLIDATED

All per share amounts are diluted and refer to Goodyear net loss.

2010 Compared to 2009

For the year ended December 31, 2010, Goodyear net loss was $216 million, or $0.89 per share, compared to $375 million, or $1.55 per share, in 2009.

Net Sales

Net sales in 2010 of $18.8 billion increased $2.5 billion, or 15.5%, compared to 2009 due primarily to increased tire volume of $1,044 million, primarily in North American Tire and EMEA, $867 million due to favorable changes in price and product mix, and increased sales in other tire-related businesses of $582 million, primarily in North American Tire's third party sales of chemical products. Consumer and commercial net sales in 2010 were $10.3 billion and $3.5 billion, respectively. Consumer and commercial net sales in 2009 were $9.4 billion and $2.8 billion, respectively.

The following table presents our tire unit sales for the periods indicated:

(In millions of tires)	Year Ended December 31, 2010	2009	% Change
Replacement Units			
North American Tire (U.S. and Canada)	50.8	50.0	1.4%
International	82.2	78.0	5.3%
Total	133.0	128.0	3.9%
OE Units			
North American Tire (U.S. and Canada)	15.9	12.7	25.4%
International	31.9	26.3	21.3%
Total	47.8	39.0	22.5%
Goodyear worldwide tire units	180.8	167.0	8.2%

The increase in worldwide tire unit sales of 13.8 million units, or 8.2%, compared to 2009, included an increase of 8.8 million OE units, or 22.5%, due primarily to increases in the consumer markets in North American Tire and EMEA due to improved economic conditions resulting in higher demand for new vehicles, and an increase of 5.0 million units, or 3.9%, in replacement units, primarily in EMEA. EMEA replacement volume increased 2.8 million units, or 5.2%, primarily in consumer, and Latin American Tire replacement volume increased 0.9 million units, or 6.7%, due to improved economic conditions in Europe and Latin America. Consumer and commercial units in 2010 were 164.4 million and 14.0 million, respectively. Consumer and commercial units in 2009 were 152.9 million and 12.2 million, respectively.

Cost of Goods Sold

Cost of goods sold ("CGS") was $15.5 billion in 2010, increasing $1.8 billion, or 13.0%, compared to 2009. CGS in 2010 increased due primarily to higher tire volume of $850 million, mainly in North American Tire and EMEA, higher raw material costs of $549 million, higher costs in other tire-related businesses of $529 million, primarily in North American Tire's cost of chemical products, and product mix-related manufacturing cost increases of $178 million. CGS was favorably impacted by decreased conversion costs of $295 million, due primarily to lower under-absorbed fixed overhead costs of $278 million due to higher production volume. CGS benefited from savings from rationalization plans of $91 million. CGS in 2010 included charges for accelerated depreciation and asset write-offs of $15 million ($11 million after-tax or $0.05 per share), compared to $43 million in 2009 ($38 million after-tax or $0.16 per share). CGS in 2010 also included gains from supplier settlements of $12 million ($8 million after-tax or $0.03 per share), expense due to a supplier disruption of $4 million ($4 million after-tax or $0.02 per share), a one-time importation cost adjustment of $3 million ($3 million after-tax or $0.01 per share), and the impact of a strike in South Africa of $3 million ($3 million after-tax or $0.01 per share). CGS was 82.1% of sales in 2010 compared to 83.9% in 2009.

Selling, Administrative and General Expense

Selling, administrative and general expense ("SAG") was $2.6 billion in 2010, increasing $226 million, or 9.4%, compared to 2009. SAG increased due primarily to increased wages and benefits of $103 million, including $63 million of incentive compensation, higher advertising expenses of $47 million, and increased warehousing costs of $17 million. SAG benefited from savings from rationalization plans of $18 million and an insurance recovery of $8 million ($8 million after-tax or $0.03 per share). SAG in 2010 was 14.0% of sales, compared to 14.7% in 2009.

Rationalizations

To maintain global competitiveness, we have implemented rationalization actions over the past several years to reduce excess and high-cost manufacturing capacity and to reduce selling, administrative and general expenses

through associate headcount reductions. We recorded net rationalization charges of $240 million in 2010 ($225 million after-tax or $0.93 per share). Rationalization actions in 2010 consisted of the plan to close our tire manufacturing facility in Union City, Tennessee, the consolidation of several warehouses in North American Tire, an increase in costs related to the discontinuation of consumer tire production at one of our facilities in Amiens, France, and the closure of a tire manufacturing facility in Taiwan. Additional rationalization charges of approximately $50 million related to 2010 rationalization plans have not yet been recorded and are expected to be incurred and recorded during the next twelve months.

We recorded net rationalization charges of $227 million in 2009 ($182 million after-tax or $0.75 per share). Rationalization actions in 2009 consisted of initiatives in North American Tire to reduce manufacturing headcount at several facilities, including Union City, Tennessee; Danville, Virginia and Topeka, Kansas, to respond to lower production demand. Additional salaried headcount reductions were initiated at our corporate offices in Akron, Ohio, in North American Tire and throughout EMEA. We also initiated the discontinuation of consumer tire production at one of our facilities in Amiens, France and manufacturing headcount reductions at each of our two facilities in Brazil.

Upon completion of the 2010 plans, we estimate that annual operating costs will be reduced by approximately $97 million ($86 million CGS and $11 million SAG). The savings realized in 2010 for the 2010 plans totaled $9 million ($4 million CGS and $5 million SAG). In addition, savings realized in 2010 for the 2009 plans totaled $147 million ($121 million CGS and $26 million SAG).

For further information, refer to the Note to the Consolidated Financial Statements No. 2, Costs Associated with Rationalization Programs.

Interest Expense

Interest expense was $316 million in 2010, increasing $5 million compared to 2009. The increase was due primarily to higher weighted average interest rates in 2010 partially offset by lower average debt levels.

Other Expense

Other Expense in 2010 was $186 million, increasing $146 million from $40 million in 2009. Net foreign currency exchange losses in 2010 were $159 million compared to $7 million in 2009. The 2010 period included a first quarter foreign exchange loss of $110 million ($99 million after-tax or $0.41 per share) resulting from the January 8, 2010 devaluation of the Venezuelan bolivar fuerte against the U.S. dollar and a fourth quarter foreign exchange loss of $24 million ($20 million after-tax or $0.08 per share) in connection with the January 1, 2011 elimination of the two-tier exchange rate structure, which was announced by the Venezuelan government in December 2010. Foreign currency exchange also reflected net gains and losses resulting from the effect of exchange rate changes on various foreign currency transactions worldwide.

Effective January 1, 2010, Venezuela's economy was considered to be highly inflationary under U.S. generally accepted accounting principles since it experienced a rate of general inflation in excess of 100% over the latest three year period, based upon the blended Consumer Price Index and National Consumer Price Index. Accordingly, the U.S. dollar was determined to be the functional currency of our Venezuelan subsidiary. All gains and losses resulting from the remeasurement of its financial statements since January 1, 2010 were determined using official exchange rates.

On January 8, 2010, Venezuela established a two-tier exchange rate structure for essential and non-essential goods. For essential goods the official exchange rate was 2.6 bolivares fuertes to the U.S. dollar and for non-essential goods the official exchange rate was 4.3 bolivares fuertes to the U.S. dollar. As announced by the Venezuelan government in December 2010, on January 1, 2011, the two-tier exchange rate structure was eliminated and the exchange rate for essential goods cannot be used for our unsettled amounts at December 31, 2010. Effective January 1, 2011, the official exchange rate of 4.3 bolivares fuertes to the U.S. dollar was established for substantially all goods.

The $110 million foreign currency exchange loss in the first quarter of 2010 primarily consisted of a $157 million remeasurement loss on bolivar-denominated net monetary assets and liabilities, including deferred taxes, at the time of the January 2010 devaluation. The loss was primarily related to cash deposits in Venezuela that were remeasured at the official exchange rate of 4.3 bolivares fuertes applicable to non-essential goods, and was

partially offset by a $47 million subsidy receivable related to U.S. dollar-denominated payables that were expected to be settled at the official subsidy exchange rate of 2.6 bolivares fuertes applicable to essential goods. Since we expected these payables to be settled at the subsidy essential goods rate, we established a subsidy receivable to reflect the expected benefit to be received in the form of the difference between the essential and non-essential goods exchange rates. Throughout 2010, we periodically assessed our ability to realize the benefit of the subsidy receivable, and a substantial portion of purchases by our Venezuelan subsidiary had qualified and settled at the official exchange rate for essential goods.

As a result of the elimination of the official subsidy exchange rate for essential goods, we no longer expect our Venezuelan subsidiary to settle payables at that exchange rate. Accordingly, we recorded a foreign exchange loss of $24 million in the fourth quarter of 2010 related to the reversal of the subsidy receivable at December 31, 2010.

Financing fees in 2010 of $95 million included $56 million ($56 million after-tax or $0.23 per share) related to the redemption of $973 million of long term debt, of which $50 million were cash premiums paid on the redemption and $6 million were financing fees which were written off. Also included in financing fees were costs related to our debt exchange offer of $5 million ($5 million after-tax or $0.02 per share).

Net gains on asset sales were $73 million ($48 million after-tax or $0.20 per share) in 2010 compared to net losses on asset sales of $30 million ($30 million after-tax or $0.13 per share) in 2009. Net gains in 2010 related primarily to the sale of a closed manufacturing facility in Taiwan and land in Thailand and the recognition of a deferred gain from the sale of a warehouse in Guatemala in 2008. Net losses in 2009 were due primarily to the sale of certain of our properties in Akron, Ohio that comprise our current headquarters in connection with the development of a proposed new headquarters in Akron, Ohio.

The 2010 period also included a charge of $25 million ($18 million after-tax or $0.07 per share) related to a claim regarding the use of value-added tax credits in prior years.

For further information, refer to the Note to the Consolidated Financial Statements No. 3, Other Expense.

Income Taxes

Tax expense in 2010 was $172 million on income before income taxes of $8 million primarily driven by a U.S. loss of $529 million with no tax benefit. For 2009 tax expense was $7 million on a loss before income taxes of $357 million. Our income tax expense or benefit is allocated among operations and items charged or credited directly to shareholders' equity. Pursuant to this allocation requirement, for the years ending December 31, 2010 and 2009, a $9 million ($9 million after-minority or $0.04 per share) and $100 million ($100 million after-minority or $0.42 per share), respectively, non-cash tax benefit has been allocated to the loss from our U.S. operations, with offsetting tax expense allocated to items, primarily attributable to employee benefits, charged directly to shareholders' equity. Income tax expense in 2010 also included net tax benefits of $33 million ($31 million after-minority or $0.13 per share) primarily related to a $16 million benefit on enacted tax law changes and $20 million of tax benefits related to the settlement of tax audits and the expiration of statutes of limitations in multiple tax jurisdictions. Income tax expense in 2009 also included net tax benefits of $42 million ($42 million after-minority or $0.18 per share) primarily related to a $29 million benefit resulting from the release of a valuation allowance on our Australian operations and a $19 million benefit resulting from the settlement of our 1997 through 2003 Competent Authority claim between the United States and Canada.

The difference between our effective tax rate and the U.S. statutory rate was due primarily to our continuing to maintain a full valuation allowance against our net Federal and state deferred tax assets and the adjustments discussed above.

Our losses in various taxing jurisdictions in recent periods represented sufficient negative evidence to require us to maintain a full valuation allowance against certain of our net deferred tax assets. However, in certain foreign locations, it is reasonably possible that sufficient positive evidence required to release all, or a portion, of these valuation allowances within the next 12 months will exist, resulting in possible one-time tax benefits of up to $150 million ($135 million net of minority interest).

For further information, refer to the Note to the Consolidated Financial Statements No. 15, Income Taxes.

Minority Shareholders' Net Income

Minority shareholders' net income was $52 million in 2010, compared to $11 million in 2009. The increase was due primarily to increased earnings in our joint venture in Europe.

2009 Compared to 2008

For the year ended December 31, 2009, Goodyear net loss was $375 million, or $1.55 per share, compared to $77 million, or $0.32 per share, in 2008.

Net Sales

Net sales in 2009 of $16.3 billion decreased $3.2 billion, or 16%, compared to 2008 due primarily to lower tire volume of $1.4 billion, primarily in North American Tire and EMEA, reduced sales in other tire-related businesses of $924 million, primarily in North American Tire's third party sales of chemical products, and foreign currency translation of $699 million, primarily in EMEA. Net sales also decreased $124 million due to unfavorable changes in product mix net of pricing improvements, reflecting a lower mix of high-value-added commercial truck and off-the-road tires due to weakness in those markets.

The following table presents our tire unit sales for the periods indicated:

(In millions of tires)	Year Ended December 31, 2009	2008	% Change
Replacement Units			
North American Tire (U.S. and Canada)	50.0	51.4	(2.9)%
International	78.0	82.7	(5.7)%
Total	128.0	134.1	(4.6)%
OE Units			
North American Tire (U.S. and Canada)	12.7	19.7	(35.5)%
International	26.3	30.7	(14.1)%
Total	39.0	50.4	(22.5)%
Goodyear worldwide tire units	167.0	184.5	(9.5)%

The decrease in worldwide tire unit sales of 17.5 million units, or 9.5%, compared to 2008, included a decrease of 11.4 million OE units, or 22.5%, due primarily to decreases in the consumer markets in North American Tire and EMEA due to recessionary economic conditions resulting in lower demand for new vehicles, and a decrease of 6.1 million units, or 4.6%, in replacement units, primarily in North American Tire and EMEA. North American Tire consumer replacement volume decreased 1.1 million units, or 2.3%, and EMEA consumer replacement volume decreased 2.7 million units, or 5.1%. The decline in consumer replacement volume is due in part to recessionary economic conditions in the U.S. and Europe.

Cost of Goods Sold

CGS was $13.7 billion in 2009, decreasing $2.5 billion, or 15%, compared to 2008. CGS in 2009 decreased due primarily to lower tire volume of $1.2 billion, mainly in North American Tire and EMEA, lower costs in other tire-related businesses of $788 million, primarily in North American Tire's cost of chemical products, foreign currency translation of $616 million, primarily in EMEA, product mix-related manufacturing cost decreases of $331 million and lower raw material costs of $115 million. CGS also benefited from savings from rationalization plans of $105 million. CGS was unfavorably impacted by increased conversion costs of $655 million, due primarily to higher under-absorbed fixed overhead costs of $490 million due to lower production volume. CGS in 2009 included charges for accelerated depreciation and asset write-offs of $43 million ($38 million after-tax or $0.16 per share), compared to $28 million in 2008 ($28 million after-tax or $0.12 per share). CGS in 2009 also included a charge of

$5 million ($5 million after-tax or $0.02 per share) related to our new labor contract with the USW. CGS was 83.9% of sales in 2009 compared to 82.8% in 2008.

Selling, Administrative and General Expense

SAG was $2.4 billion in 2009, decreasing $196 million, or 8%, compared to 2008. SAG decreased due primarily to reduced foreign currency translation of $105 million, lower advertising expenses of $52 million, savings from rationalization plans of $42 million, reduced transportation and warehousing costs of $27 million, lower costs for consultants and contract labor of $22 million and other cost reduction actions. SAG reflected increased incentive compensation costs of $97 million of which approximately 50% was due to an increase in our stock price. SAG in 2009 was 14.7% of sales, compared to 13.3% in 2008.

Rationalizations

We recorded net rationalization charges of $227 million in 2009 ($182 million after-tax or $0.75 per share). Rationalization actions in 2009 consisted of initiatives in North American Tire to reduce manufacturing headcount at several facilities, including Union City, Tennessee; Danville, Virginia and Topeka, Kansas, to respond to lower production demand. Additional salaried headcount reductions were initiated at our corporate offices in Akron, Ohio, in North American Tire and throughout EMEA. We also initiated the discontinuation of consumer tire production at one of our facilities in Amiens, France and manufacturing headcount reductions at each of our two facilities in Brazil.

We recorded net rationalization charges of $184 million in 2008 ($167 million after-tax or $0.69 per share), which consisted primarily of the closure of the Somerton, Australia tire manufacturing facility, the closure of the Tyler, Texas mix center, and our plan to exit 92 of our underperforming retail stores in the U.S. Other rationalization actions in 2008 related to plans to reduce manufacturing, selling, administrative and general expenses through headcount reductions in all of our strategic business units.

For further information, refer to the Note to the Consolidated Financial Statements No. 2, Costs Associated with Rationalization Programs.

Interest Expense

Interest expense was $311 million in 2009, decreasing $9 million compared to 2008. The decrease was due primarily to lower weighted average interest rates in 2009, partially offset by higher average debt levels.

Other Expense

Other Expense was $40 million in 2009 compared to $59 million in 2008. Other Expense in 2009 decreased due primarily to lower expenses for financing fees and financial instruments, general and product liability — discontinued products, and foreign currency exchange. Other Expense in 2009 was adversely affected by net losses on asset sales and lower interest income. Other Expense in 2009 included a gain of $26 million ($13 million after-tax or $0.05 per share) from the recognition of insurance proceeds related to the settlement of a claim as a result of a fire at our manufacturing facility in Thailand, net losses on asset sales of $30 million ($30 million after-tax or $0.13 per share) due primarily to the sale of properties in Akron, Ohio, a loss on the liquidation of our subsidiary in Guatemala of $18 million ($18 million after-tax or $0.08 per share), and a charge for a legal reserve for a closed facility of $5 million ($4 million after-tax or $0.02 per share).

For further information, refer to the Note to the Consolidated Financial Statements No. 3, Other Expense.

Income Taxes

Tax expense in 2009 was $7 million on a loss before income taxes of $357 million. For 2008, we recorded tax expense of $209 million on income before income taxes of $186 million. Our income tax expense or benefit is allocated among operations and items charged or credited directly to shareholders' equity. Pursuant to this allocation requirement, for 2009, a $100 million non-cash tax benefit ($100 million after-minority or $0.42 per share) has been allocated to the loss from our U.S. operations, with offsetting tax expense allocated to items,

primarily attributable to employee benefits, charged directly to shareholders' equity. Income tax expense in 2009 also included net tax benefits of $42 million ($42 million after-minority or $0.18 per share) primarily related to a $29 million benefit resulting from the release of a valuation allowance on our Australian operations and a $19 million benefit resulting from the settlement of our 1997 through 2003 Competent Authority claim between the United States and Canada.

The difference between our effective tax rate and the U.S. statutory rate was due primarily to our continuing to maintain a full valuation allowance against our net Federal and state deferred tax assets and the adjustments discussed above.

For further information, refer to the Note to the Consolidated Financial Statements No. 15, Income Taxes.

Minority Shareholders' Net Income

Minority shareholders' net income was $11 million in 2009, compared to $54 million in 2008. The decrease was due primarily to decreased earnings in our joint venture in Europe.

RESULTS OF OPERATIONS — SEGMENT INFORMATION

Segment information reflects our strategic business units ("SBUs"), which are organized to meet customer requirements and global competition and are segmented on a regional basis.

Results of operations are measured based on net sales to unaffiliated customers and segment operating income. Each segment exports tires to other segments. The financial results of each segment exclude sales of tires exported to other segments, but include operating income derived from such transactions. Segment operating income is computed as follows: Net Sales less CGS (excluding asset write-off and accelerated depreciation charges) and SAG (including certain allocated corporate administrative expenses). Segment operating income also includes certain royalties and equity in earnings of most affiliates. Segment operating income does not include net rationalization charges (credits), asset sales and certain other items.

Total segment operating income was $917 million in 2010, $372 million in 2009 and $804 million in 2008. Total segment operating margin (segment operating income divided by segment sales) in 2010 was 4.9%, compared to 2.3% in 2009 and 4.1% in 2008.

Management believes that total segment operating income is useful because it represents the aggregate value of income created by our SBUs and excludes items not directly related to the SBUs for performance evaluation purposes. Total segment operating income is the sum of the individual SBUs' segment operating income. Refer to the Note to the Consolidated Financial Statements No. 17, Business Segments, for further information and for a reconciliation of total segment operating income to Income (Loss) before Income Taxes.

North American Tire

(In millions)	Year Ended December 31, 2010	2009	2008
Tire Units	66.7	62.7	71.1
Net Sales	$8,205	$6,977	$8,255
Operating Income (Loss)	18	(305)	(156)
Operating Margin	0.2%	(4.4)%	(1.9)%

2010 Compared to 2009

North American Tire unit sales in 2010 increased 4.0 million units, or 6.3%, from the 2009 period. The increase was primarily related to an increase in OE volume of 3.2 million units, or 25.4%, primarily in our consumer business, due to increased vehicle production. Replacement volume increased 0.8 million units, or 1.4%, due primarily to improved industry volumes driven by economic growth.

Net sales in 2010 increased $1.2 billion, or 17.6%, compared to 2009 due primarily to increased sales in other tire-related businesses of $610 million, primarily related to an increase in the price and volume of third party sales of

chemical products. Higher tire volume of $304 million, improved price and product mix of $269 million and favorable foreign currency translation of $39 million also contributed to the growth in net sales.

Operating income in 2010 was $18 million, improving $323 million from a loss of $305 million in 2009. Price and product mix improved $260 million, which more than offset raw material price increases of $177 million. Operating income also benefited from lower conversion costs of $171 million, increased operating income in our other tire-related business of $47 million, primarily related to sales of chemical products, higher tire volume of $26 million and lower transportation costs of $20 million. The decrease in conversion costs was primarily driven by lower under-absorbed fixed overhead costs of $119 million due to higher production volume and savings from rationalization plans of $55 million. Lower employee benefit costs and productivity improvements were offset by inflation and higher profit sharing costs. SAG expense increased $15 million driven by increased advertising costs of $15 million and higher general and product liability expenses of $14 million partially offset by savings from rationalization plans of $8 million and lower bad debt expense of $6 million.

Operating income in 2010 excluded net rationalization charges of $184 million primarily related to the closure of our Union City, Tennessee manufacturing facility, net gains on asset sales of $2 million and charges for accelerated depreciation of $2 million. Operating loss in 2009 excluded net rationalization charges of $112 million, charges for accelerated depreciation and asset write-offs of $16 million, and net gains on asset sales of $4 million.

2009 Compared to 2008

North American Tire unit sales in 2009 decreased 8.4 million units, or 11.9%, from the 2008 period. The decrease was primarily related to a decline in OE volume of 7 million units, or 35.5%, primarily in our consumer business, due to reduced vehicle production. Replacement volume decreased 1.4 million units, or 2.9%, primarily in the consumer business, due to continuing recessionary economic conditions.

Net sales in 2009 decreased $1.3 billion, or 15.5%, compared to 2008 due primarily to decreased sales in other tire-related businesses of $729 million, primarily related to third party sales of chemical products, lower tire volume of $635 million and unfavorable foreign currency translation of $38 million. Net sales were favorably affected by improved price and product mix of $124 million.

Operating loss in 2009 increased $149 million, or 95.5%, compared to 2008 due primarily to higher conversion costs of $220 million, decreased sales volume of $77 million and lower operating income in chemical and other tire-related businesses of $82 million. Conversion costs increased due primarily to higher under-absorbed fixed overhead costs of $245 million as a result of reduced production volume, and increased pension expense as a result of lower 2008 returns on plan assets and higher amortization of net losses. Increased pension and defined contribution expense of $159 million more than offset savings resulting from the implementation of the Voluntary Employees' Beneficiary Association ("VEBA") of $89 million. Conversion costs were favorably impacted by savings from rationalization plans of $60 million and lower utility costs of $21 million. Operating income was favorably affected by lower raw material costs of $85 million, improved price and product mix of $78 million, reduced SAG of $38 million and lower transportation costs of $19 million. SAG decreased due primarily to reduced warehousing costs and savings from rationalization programs.

Operating loss in 2009 excluded net rationalization charges of $112 million, $16 million of charges for accelerated depreciation and asset write-offs, and net gains on asset sales of $4 million. Operating income in 2008 excluded net rationalization charges of $54 million, net gains on asset sales of $18 million and $3 million of charges for accelerated depreciation.

Europe, Middle East and Africa Tire

(In millions)	Year Ended December 31, 2010	2009	2008
Tire Units	72.0	66.0	73.6
Net Sales	$6,407	$5,801	$7,316
Operating Income	319	166	425
Operating Margin	5.0%	2.9%	5.8%

2010 Compared to 2009

Europe, Middle East and Africa Tire unit sales in 2010 increased 6.0 million units, or 9.0%, from the 2009 period. OE volume increased 3.2 million units, or 24.4%, primarily in our consumer business, due to increased vehicle production. Replacement volume increased 2.8 million units, or 5.2%, primarily in the consumer business, due to improved economic conditions and a strong winter season.

Net sales in 2010 increased $606 million, or 10.4%, compared to 2009, due primarily to higher volume of $454 million and improved price and product mix of $356 million. These increases were partially offset by unfavorable foreign currency translation of $193 million.

Operating income in 2010 increased $153 million, or 92.2%, compared to 2009, due primarily to lower conversion costs of $174 million and increased volume of $118 million. Conversion costs decreased due primarily to lower under-absorbed fixed overhead costs of $108 million due to higher production volume. Operating income was unfavorably affected by higher raw material costs of $182 million, which were partially offset by improved price and product mix of $131 million, higher SAG expenses of $73 million, and unfavorable foreign currency translation of $17 million. SAG expenses increased due to higher wages and benefits of $35 million and increased advertising expenses of $26 million. Conversion costs and SAG expenses included savings from rationalization plans of $12 million and $7 million, respectively.

Operating income in 2010 excluded net rationalization charges of $41 million and net gains on asset sales of $6 million and charges for accelerated depreciation and asset write-offs of $1 million. Operating income in 2009 excluded net rationalization charges of $82 million and net gains on asset sales of $1 million.

EMEA's results are highly dependent upon Germany, which accounted for approximately 35% and 33% of EMEA's net sales in 2010 and 2009, respectively. Accordingly, results of operations in Germany will have a significant impact on EMEA's future performance. In addition, excluding the estimated loss on the sale of approximately $50 million to $75 million, EMEA's operating income is expected to be favorably affected by approximately $20 million to $25 million on an annualized basis due to the anticipated sale of our EMEA farm tire business as a result of recent operating losses in that business. The transaction is subject to the exercise of a put option by us following completion of a social plan related to the previously announced discontinuation of consumer tire production at one of our facilities in Amiens, France and required consultation with various works councils.

2009 Compared to 2008

Europe, Middle East and Africa Tire unit sales in 2009 decreased 7.6 million units, or 10.3%, from the 2008 period. OE volume decreased 4.5 million units, or 25.4%, primarily in our consumer business, due to reduced vehicle production. Replacement volume decreased 3.1 million units, or 5.5%, primarily in the consumer business, due to recessionary economic conditions.

Net sales in 2009 decreased $1.5 billion, or 20.7%, compared to 2008, due primarily to lower volume of $665 million, foreign currency translation of $450 million and lower sales in other tire-related businesses of $150 million. Net sales also decreased by $250 million as a result of unfavorable changes in product mix, net of pricing improvements.

Operating income in 2009 decreased $259 million, or 60.9%, compared to 2008, due primarily to higher conversion costs of $258 million, decreased volume of $148 million, and decreased operating income in other tire-related businesses of $44 million. Conversion costs increased due primarily to higher under-absorbed fixed overhead costs of $195 million due to reduced production volume. Conversion costs included savings from rationalization plans of $19 million. Operating income was favorably affected by lower SAG expenses of $113 million, improved price and mix of $22 million, lower raw material costs of $16 million and favorable foreign currency translation of $16 million. SAG savings included lower advertising expenses of $45 million, savings from rationalization plans of $20 million, lower consulting and contract labor costs of $16 million and reduced travel-related expenses of $16 million.

Operating income in 2009 excluded net rationalization charges of $82 million and net gains on asset sales of $1 million. Operating income in 2008 excluded net rationalization charges of $41 million and net gains on asset sales of $20 million.

Latin American Tire

(In millions)	Year Ended December 31, 2010	2009	2008
Tire Units	20.7	19.1	20.0
Net Sales	$2,158	$1,814	$2,088
Operating Income	330	301	367
Operating Margin	15.3%	16.6%	17.6%

2010 Compared to 2009

Latin American Tire unit sales in 2010 increased 1.6 million units, or 8.5%, from the 2009 period. Replacement tire volume increased 0.9 million units, or 6.7%, reflecting increased volume in both consumer and commercial businesses. OE volume increased 0.7 million units, or 12.3%, due primarily to an increase in our consumer business.

Net sales in 2010 increased $344 million, or 19.0%, from the 2009 period, due primarily to improved price and product mix of $219 million and increased volume of $128 million. These increases were partially offset by unfavorable foreign currency translation of $30 million which included $192 million related to the devaluation of the Venezuelan bolivar fuerte.

Operating income in 2010 increased $29 million, or 9.6%, from the same period in 2009, due primarily to improved price and product mix of $188 million, which more than offset higher raw material costs of $84 million, and lower conversion costs of $24 million. These increases were partially offset by unfavorable foreign currency translation of $49 million, higher SAG costs of $26 million, and lower profitability on intersegment transfers of $24 million. Higher SAG expenses included higher wages and benefits of $13 million and higher warehousing expenses of $11 million. Conversion costs included lower under-absorbed fixed overhead costs of $41 million and savings from rationalization plans of $8 million.

Operating income in 2010 excluded a charge of $25 million related to a claim regarding the use of value-added tax credits in prior periods, net gains on asset sales of $7 million, and net rationalization charges of $5 million. In addition, a $134 million foreign currency exchange loss in Venezuela also is excluded from operating income in 2010. Operating income in 2009 excluded net rationalization charges of $20 million and net gains on asset sales of $2 million. In addition, operating income excluded charges of $18 million in 2009 resulting from the recognition of accumulated foreign currency translation losses in connection with the liquidation of our subsidiary in Guatemala.

Latin American Tire's results are highly dependent upon Brazil, which accounted for approximately 61% and 51% of Latin American Tire's net sales in 2010 and 2009, respectively. Accordingly, results of operations in Brazil will have a significant impact on Latin American Tire's future performance. In addition, Latin America Tire's operating income is expected to be adversely impacted by approximately $30 million to $35 million on an annualized basis due to the anticipated sale of our Latin American Tire farm tire business. The sale is expected to close in the first half of 2011.

Goodyear Venezuela contributed a significant portion of Latin American Tire's sales and operating income in 2010 and 2009. The devaluation of the Venezuelan bolivar fuerte against the U.S. dollar in January 2010 and weak economic conditions adversely impacted Latin American Tire's operating results by approximately $85 million as compared to 2009. The elimination of the official exchange rate for essential goods is not expected to have a significant impact on Latin American Tire's sales and operating income in 2011 compared to 2010. For further information see "Item 1A. Risk Factors" and "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Overview" in this Form 10-K.

2009 Compared to 2008

Latin American Tire unit sales in 2009 decreased 0.9 million units, or 4.5%, from the 2008 period. Replacement tire volume decreased 0.8 million units, or 5.9%, reflecting reduced volume in both consumer and commercial businesses. OE volume decreased 0.1 million units, or 1.3%, due primarily to a decrease in our commercial business.

Net sales in 2009 decreased $274 million, or 13.1%, from the 2008 period, due primarily to foreign currency translation of $123 million, decreased volume of $92 million, lower sales of other tire-related businesses of $33 million, and $26 million as a result of unfavorable changes in product mix, net of pricing improvements.

Operating income in 2009 decreased $66 million, or 18.0%, from the same period in 2008, due primarily to higher conversion costs of $43 million, lower volume of $28 million, lower profitability on intersegment transfers of $21 million, higher inventory reserves of $4 million and costs related to manufacturing start-up activities of $3 million. Conversion costs increased due primarily to higher under-absorbed fixed overhead costs of $43 million and other inflation of $10 million. Conversion costs also included savings from rationalization plans of $15 million. Operating income was favorably affected by improvements in price and product mix of $69 million, which more than offset higher raw material costs of $16 million. Operating income in 2008 included a gain of $12 million related to the favorable settlement of an excise tax case.

Operating income in 2009 excluded net rationalization charges of $20 million and net gains on asset sales of $2 million. Operating income in 2008 excluded net gains on asset sales of $5 million and net rationalization charges of $4 million. In addition, operating income excluded charges of $18 million and $16 million in 2009 and 2008, respectively, resulting from the recognition of accumulated foreign currency translation losses in connection with the liquidation of our subsidiaries in Guatemala and Jamaica.

Asia Pacific Tire

(In millions)	Year Ended December 31, 2010	2009	2008
Tire Units	21.4	19.2	19.8
Net Sales	$2,062	$1,709	$1,829
Operating Income	250	210	168
Operating Margin	12.1%	12.3%	9.2%

2010 Compared to 2009

Asia Pacific Tire unit sales in 2010 increased 2.2 million units, or 11.6%, from the 2009 period. OE volumes increased 1.6 million units, or 22.5%, primarily in the consumer business and replacement unit sales increased 0.6 million units, or 5.2%. The increase in units is due to continued growth in vehicle production in China and India.

Net sales in 2010 increased $353 million, or 20.7%, compared to the 2009 period, due primarily to foreign currency translation of $172 million, increased volume of $158 million and improved price and product mix of $23 million.

Operating income in 2010 increased $40 million, or 19.0%, compared to the 2009 period, due primarily to improved price and product mix of $110 million, which was offset by higher raw material costs of $106 million, increased volume of $32 million, favorable foreign currency translation of $21 million and decreased conversion costs of $19 million. Conversion costs included savings from rationalization plans of $16 million and lower under-absorbed fixed overhead costs of $10 million. Operating income was adversely affected by start-up expenses for our new manufacturing facility in Pulandian, China of approximately $10 million and higher SAG costs of $22 million, including increased wages and benefits of $9 million. Operating income in 2009 included a gain of $7 million from insurance proceeds related to the settlement of a claim as a result of a fire at our manufacturing facility in Thailand in 2007.

Operating income in 2010 and 2009 excluded charges for accelerated depreciation and asset write-offs of $12 million and $26 million, respectively, and net rationalization charges of $11 million and $10 million,

respectively. In addition, operating income excluded net gains on asset sales of $58 million and $5 million in 2010 and 2009, respectively, due primarily to the sale of a closed manufacturing facility in Taiwan and land in Thailand in 2010.

Asia Pacific Tire's results are highly dependent upon Australia, which accounted for approximately 43% and 45% of Asia Pacific Tire's net sales in 2010 and 2009, respectively. Accordingly, results of operations in Australia will have a significant impact on Asia Pacific Tire's future performance. In 2011, start-up expenses of our new manufacturing facility in Pulandian, China are expected to adversely impact Asia Pacific Tire's operating income by $30 million to $40 million compared to 2010.

2009 Compared to 2008

Asia Pacific Tire unit sales in 2009 decreased 0.6 million units, or 2.9%, from the 2008 period. Replacement unit sales decreased 0.8 million units, or 6.3%, while OE volumes increased 0.2 million units, or 3.4%, primarily in the consumer business. The net decrease in units is due to recessionary economic conditions, primarily in Australia, that were partially offset by increased growth in vehicle production in China.

Net sales in 2009 decreased $120 million, or 6.6%, compared to the 2008 period, due primarily to foreign currency translation of $88 million, lower volume of $48 million and decreased sales in other tire-related businesses of $12 million, primarily in the retail business. Net sales were favorably affected by improved price and product mix of $28 million.

Operating income in 2009 increased $42 million, or 25.0%, compared to the 2008 period, due primarily to improved price and mix of $38 million, lower raw material costs of $30 million and decreased conversion costs of $6 million. Conversion costs included savings from rationalization plans of $12 million, partially offset by $7 million of under-absorbed fixed overhead costs due to reduced production volume. Operating income in 2009 included a gain of $7 million from insurance proceeds related to the settlement of a claim as a result of a fire at our manufacturing facility in Thailand in 2007. Operating income was adversely affected by lower volume of $13 million, decreased operating income in other tire-related businesses of $8 million, and increases in incentive compensation expense of $9 million and in the cost of imported finished tires of $6 million.

Operating income in 2009 and 2008 excluded charges for accelerated depreciation and asset write-offs of $26 million and $24 million, respectively, and net rationalization charges of $10 million and $83 million, respectively, primarily related to the closure of our manufacturing facilities in the Philippines and Australia. In addition, operating income excluded net gains on asset sales of $5 million and $10 million in 2009 and 2008, respectively.

CRITICAL ACCOUNTING POLICIES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and related notes to the financial statements. On an ongoing basis, management reviews its estimates, based on currently available information. Changes in facts and circumstances may alter such estimates and affect results of operations and financial position in future periods. Our critical accounting policies relate to:

- general and product liability and other litigation,
- workers' compensation,
- recoverability of goodwill,
- deferred tax asset valuation allowance and uncertain income tax positions, and
- pensions and other postretirement benefits.

General and Product Liability and Other Litigation. General and product liability and other recorded litigation liabilities are recorded based on management's assessment that a loss arising from these matters is probable. If the loss can be reasonably estimated, we record the amount of the estimated loss. If the loss is estimated within a range and no point within the range is more probable than another, we record the minimum amount in the range. As

additional information becomes available, any potential liability related to these matters is assessed and the estimates are revised, if necessary. Loss ranges are based upon the specific facts of each claim or class of claims and are determined after review by counsel. Court rulings on our cases or similar cases may impact our assessment of the probability and our estimate of the loss, which may have an impact on our reported results of operations, financial position and liquidity. We record receivables for insurance recoveries related to our litigation claims when it is probable that we will receive reimbursement from the insurer. Specifically, we are a defendant in numerous lawsuits alleging various asbestos-related personal injuries purported to result from alleged exposure to asbestos 1) in certain rubber encapsulated products or aircraft braking systems manufactured by us in the past, or 2) in certain of our facilities. Typically, these lawsuits have been brought against multiple defendants in Federal and state courts.

A significant assumption in our estimated asbestos liability is the period over which the liability can be reasonably estimated. Due to the difficulties in making these estimates, analysis based on new data and/or changed circumstances arising in the future may result in an increase in the recorded obligation in an amount that cannot be reasonably estimated, and that increase may be significant. We had recorded liabilities for both asserted and unasserted asbestos claims, inclusive of defense costs, totaling $126 million at December 31, 2010. The portion of the liability associated with unasserted asbestos claims and related defense costs was $63 million. At December 31, 2010, we estimate that it is reasonably possible that our gross liabilities, net of our estimate for probable insurance recoveries, could exceed our recorded amounts by approximately $10 million.

We maintain primary insurance coverage under coverage-in-place agreements as well as excess liability insurance with respect to asbestos liabilities. We record a receivable with respect to such policies when we determine that recovery is probable and we can reasonably estimate the amount of a particular recovery. This determination is based on consultation with our outside legal counsel and taking into consideration agreements in principle with certain of our insurance carriers, the financial viability and legal obligations of our insurance carriers and other relevant factors.

As of December 31, 2010, (i) we had recorded a receivable related to asbestos claims of $67 million, and (ii) we expect that approximately 50% of asbestos claim related losses would be recoverable through insurance through the period covered by the estimated liability. The receivables recorded consist of an amount we expect to collect under coverage-in-place agreements with certain primary carriers as well as an amount we believe is probable of recovery from certain of our excess coverage insurance carriers. Of this amount, $8 million was included in Current Assets as part of Accounts receivable at December 31, 2010.

Workers' Compensation. We had recorded liabilities, on a discounted basis, of $291 million for anticipated costs related to U.S. workers' compensation claims at December 31, 2010. The costs include an estimate of expected settlements on pending claims, defense costs and a provision for claims incurred but not reported. These estimates are based on our assessment of potential liability using an analysis of available information with respect to pending claims, historical experience, and current cost trends. The amount of our ultimate liability in respect of these matters may differ from these estimates. We periodically, and at least annually, update our loss development factors based on actuarial analyses. The liability is discounted using the risk-free rate of return.

For further information on general and product liability and other litigation, and workers' compensation, refer to the Note to the Consolidated Financial Statements No. 19, Commitments and Contingent Liabilities.

Recoverability of Goodwill. Goodwill is not amortized. Rather, goodwill is tested for impairment annually or more frequently if an indicator of impairment is present. Goodwill totaled $683 million at December 31, 2010.

We have determined our reporting units to be consistent with our operating segments comprised of four strategic business units: North American Tire, Europe, Middle East and Africa Tire, Latin American Tire, and Asia Pacific Tire. Goodwill is allocated to these reporting units based on the original purchase price allocation for acquisitions within the various reporting units. There have been no changes to our reporting units or in the manner in which goodwill was allocated in 2010.

Our annual impairment testing is conducted as of July 31st each year and for 2010 our analysis indicated no impairment of goodwill. For purposes of our annual testing in 2010, we determined the estimated fair values using a discounted cash flow approach. We believe this methodology is appropriate in the determination of fair value. We

may also use different fair value techniques when we believe a discounted cash flow approach may not provide an appropriate determination of fair value.

The discounted cash flow model of the reporting units is based on the forecasted operating cash flow for the current year, projected operating cash flows for the next nine years (determined using forecasted amounts as well as an estimated growth rate) and a terminal value beyond ten years. Discounted cash flows consist of the operating cash flows for each business unit less an estimate for capital expenditures. The key assumptions incorporated in the discounted cash flow approach include growth rates, projected segment operating income, changes in working capital, our plan for capital expenditures, anticipated funding for pensions, and a discount rate equal to our assumed long term cost of capital. Corporate administrative expenses are allocations of corporate overhead that we make to each strategic business unit and are excluded from the discounted cash flow model. Cash flows may be adjusted to exclude certain non-recurring or unusual items. As segment operating income was the starting point for determining operating cash flow, which excludes non-recurring or unusual items, there were no other non-recurring or unusual items excluded from the calculations of operating cash flow in any of the periods included in our determination of fair value.

We consider significant decreases in forecasted cash flows in future periods to be an indication of a potential impairment. At the time of our annual impairment testing, fair value would have to decline in excess of 40% for North American Tire, over 45% for EMEA and over 20% for Asia Pacific Tire to reduce fair value below carrying value. The discount rate used would have to increase over two percentage points for North American Tire, over seven percentage points for EMEA and over two percentage points for Asia Pacific Tire or the assumed growth rate would have to be negative for each of the business units to indicate a potential impairment.

Deferred Tax Asset Valuation Allowance and Uncertain Income Tax Positions. At December 31, 2010, we had a valuation allowance aggregating $3.1 billion against all of our net Federal and state and certain of our foreign net deferred tax assets.

We assess both negative and positive evidence when measuring the need for a valuation allowance. Evidence, such as operating results during the most recent three-year period, is given more weight than our expectations of future profitability, which are inherently uncertain. Our losses in the U.S. and certain foreign locations in recent periods represented sufficient negative evidence to require a full valuation allowance against our net Federal, state and certain of our foreign deferred tax assets. We intend to maintain a valuation allowance against our net deferred tax assets until sufficient positive evidence exists to support the realization of such assets.

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations. We recognize liabilities for anticipated tax audit issues based on our estimate of whether, and the extent to which, additional taxes will be due. If we ultimately determine that payment of these amounts is unnecessary, we reverse the liability and recognize a tax benefit during the period in which we determine that the liability is no longer necessary. We also recognize tax benefits to the extent that it is more likely than not that our positions will be sustained when challenged by the taxing authorities. We derecognize tax benefits when based on new information we determine that it is no longer more likely than not that our position will be sustained. To the extent we prevail in matters for which liabilities have been established, or determine we need to derecognize tax benefits recorded in prior periods, or that we are required to pay amounts in excess of our liabilities, our effective tax rate in a given period could be materially affected. An unfavorable tax settlement would require use of our cash, and result in an increase in our effective tax rate in the period of resolution. A favorable tax settlement would be recognized as a reduction in our effective tax rate in the period of resolution. We report interest and penalties related to uncertain income tax positions as income taxes. For additional information regarding uncertain income tax positions, refer to the Note to the Consolidated Financial Statements No. 15, Income Taxes.

Pensions and Other Postretirement Benefits. Our recorded liabilities for pensions and other postretirement benefits are based on a number of assumptions, including:

- life expectancies,
- retirement rates,
- discount rates,

- long term rates of return on plan assets,
- future compensation levels,
- future health care costs, and
- maximum company-covered benefit costs.

Certain of these assumptions are determined with the assistance of independent actuaries. Assumptions about life expectancies, retirement rates, future compensation levels and future health care costs are based on past experience and anticipated future trends, including an assumption about inflation. The discount rate for our U.S. plans is based on a yield curve derived from a portfolio of corporate bonds from issuers rated Aa or higher as of December 31 and is reviewed annually. Our expected benefit payment cash flows are discounted based on spot rates developed from the yield curve. The long term rate of return on plan assets is based on the compound annualized return of our U.S. pension fund over a period of 15 years or more, estimates of future long term rates of return on assets similar to the target allocation of our pension fund and long term inflation. Actual U.S. pension fund asset allocations are reviewed on a monthly basis and the pension fund is rebalanced to target ranges on an as-needed basis. These assumptions are reviewed regularly and revised when appropriate. Changes in one or more of them may affect the amount of our recorded liabilities and net periodic costs for these benefits. Other assumptions involving demographic factors such as retirement age, mortality and turnover are evaluated periodically and are updated to reflect our experience and expectations for the future. If the actual experience differs from expectations, our financial position, results of operations and liquidity in future periods may be affected.

The weighted average discount rate used in estimating the total liability for our U.S. pension and other postretirement benefit plans was 5.20% and 4.62%, respectively, at December 31, 2010, compared to 5.75% and 5.45% for our U.S. pension and other postretirement benefit plans, respectively, at December 31, 2009. The decrease in the discount rate at December 31, 2010 was due primarily to lower interest rate yields on highly rated corporate bonds. Interest cost included in our U.S. net periodic pension cost was $296 million in 2010, compared to $314 million in 2009 and $312 million in 2008. Interest cost included in our worldwide net periodic other postretirement benefits cost was $33 million in 2010, compared to $32 million in 2009 and $84 million in 2008. Interest cost decreased in 2009 as a result of the reduction in other postretirement benefits liability due to the VEBA settlement.

The following table presents the sensitivity of our U.S. projected pension benefit obligation, accumulated other postretirement benefits obligation, shareholders' equity, and 2011 expense to the indicated increase/decrease in key assumptions:

		+/− Change at December 31, 2010		
(Dollars in millions)	Change	PBO/ABO	Equity	2011 Expense
Pensions:				
Assumption:				
Discount rate	+/− 0.5%	$ 298	$ 298	$11
Actual 2010 return on assets	+/− 1.0%	N/A	33	5
Expected return on assets	+/− 1.0%	N/A	N/A	36
Other Postretirement Benefits:				
Assumption:				
Discount rate	+/− 0.5%	$ 12	$ 12	$—
Health care cost trends — total cost	+/− 1.0%	3	3	—

A significant portion of the net actuarial loss included in AOCL of $2,314 million in our U.S. pension plans as of December 31, 2010 is a result of 2008 plan asset losses and the overall decline in U.S. discount rates over time. For purposes of determining our 2010 U.S. net periodic pension expense, our funded status was such that we recognized $133 million of the net actuarial loss in 2010. We will recognize approximately $135 million of net actuarial losses in 2011. If our future experience is consistent with our assumptions as of December 31, 2010, actuarial loss recognition over the next few years will remain at an amount near that to be recognized in 2011 before it begins to gradually decline.

The actual rate of return on our U.S. pension fund was 14.4%, 25.6% and (31.7)% in 2010, 2009 and 2008, respectively, as compared to the expected rate of 8.5% for all three years. We use the fair value of our pension assets in the calculation of pension expense for all of our U.S. pension plans.

We experienced a decrease in our U.S. discount rate at the end of 2010 and a large portion of the net actuarial loss included in AOCL of $180 million in our worldwide other postretirement benefit plans as of December 31, 2010 is a result of the overall decline in U.S. discount rates over time. The net actuarial loss increased from 2009 due to the decrease in the discount rate at December 31, 2010. For purposes of determining 2010 worldwide net periodic other postretirement benefits cost, we recognized $9 million of the net actuarial losses in 2010. We will recognize approximately $12 million of net actuarial losses in 2011. If our future experience is consistent with our assumptions as of December 31, 2010, actuarial loss recognition over the next few years will remain at an amount near that to be recognized in 2011 before it begins to gradually decline.

The weighted average amortization period for our U.S. plans is approximately 14 years.

For further information on pensions and other postretirement benefits, refer to the Note to the Consolidated Financial Statements No. 14, Pension, Other Postretirement Benefits and Savings Plans.

LIQUIDITY AND CAPITAL RESOURCES

OVERVIEW

Our primary sources of liquidity are cash generated from our operating and financing activities. Our cash flows from operating activities are driven primarily by our operating results and changes in our working capital requirements and our cash flows from financing activities are dependent upon our ability to access credit or other capital.

We faced an uncertain business environment in 2010 as the global economy continued its recovery from the recessionary economic conditions that existed in many parts of the world during 2008 and 2009, particularly in North America and Europe. We also faced a number of substantial challenges, such as rapidly rising raw material and energy costs, wage inflation in emerging markets, continued pressure from our unfunded pension obligations, and the devaluation of the currency and economic weakness in Venezuela. Global tire industry demand, while improving, continues to be below pre-recessionary levels in North America and remains hard to predict, especially for OE production.

Given the uncertain economic environment, in 2010 we remained focused on cash flow in order to provide funding for investments in future growth, and took several actions to strengthen our liquidity, including:

- Further improvements in working capital through strong inventory management, improved vendor terms and good collections at year-end; and

- The successful completion of a $1.0 billion debt offering in August 2010 that addressed our 2011 debt maturities.

For further information on the other strategic initiatives we pursued in 2010, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations — Overview."

At December 31, 2010, we had $2,005 million in Cash and cash equivalents, compared to $1,922 million at December 31, 2009. Cash and cash equivalents were favorably affected by the reduced net loss compared to 2009, improvements in trade working capital of $52 million and proceeds from the issuance of our $1.0 billion 8.25% senior notes due 2020. Partially offsetting these increases in Cash and cash equivalents were capital expenditures of $944 million and the redemption of $973 million of outstanding notes, including $713 million of notes due in 2011 and $260 million of notes due in 2015.

At December 31, 2010 and 2009, we had $2,475 million and $2,567 million, respectively, of unused availability under our various credit agreements. The table below provides unused availability by our significant credit facilities as of December 31:

(In millions)	2010	2009
$1.5 billion first lien revolving credit facility due 2013	$1,001	$ 892
€505 million revolving credit facility due 2012	664	712
China financing agreements	394	530
Other U.S. and international debt	158	124
Notes payable and overdrafts	258	309
	$2,475	$2,567

At December 31, 2010, our unused availability included $394 million which can only be used to finance the relocation and expansion of our manufacturing facilities in China. These credit facilities, along with government grants, should provide funding for most of the cost related to the relocation and expansion of these manufacturing facilities. There were $153 million of borrowings outstanding under these credit facilities at December 31, 2010.

We have deposited our cash and cash equivalents and entered into various credit agreements and derivative contracts with financial institutions that we considered to be substantial and creditworthy at the time of such transactions. We seek to control our exposure to these financial institutions by diversifying our deposits, credit agreements and derivative contracts across multiple financial institutions, by setting deposit and counterparty credit limits based on long term credit ratings and other indicators of credit risk such as credit default swap spreads, and by monitoring the financial strength of these financial institutions on a regular basis. We also enter into master netting agreements with counterparties when possible. By controlling and monitoring exposure to financial institutions in this manner, we believe that we effectively manage the risk of loss due to nonperformance by a financial institution. However, we cannot provide assurance that we will not experience losses or delays in accessing our deposits or lines of credit due to the nonperformance of a financial institution. Our inability to access our cash deposits or make draws on our lines of credit, or the inability of a counterparty to fulfill its contractual obligations to us, could have a material adverse effect on our liquidity, financial position or results of operations in the period in which it occurs.

In 2011, we expect our operating needs to include global contributions to our funded pension plans of approximately $250 million to $300 million and our investing needs to include capital expenditures of approximately $1.1 billion to $1.2 billion. We also expect interest expense to range between $350 million and $375 million. The strategic initiatives described above are intended to permit us to operate the business in a way that allows us to address these needs with our existing cash and available credit if they cannot be funded by cash generated from operations. If market opportunities exist, we may choose to undertake additional financing actions in order to further enhance our liquidity position which could include obtaining new bank debt or capital markets transactions.

In March 2010, we completed an offer to exchange our outstanding 7.857% notes due 2011 for a new series of 8.75% notes due 2020. A total of $262 million in aggregate principal amount of the 7.857% notes due 2011 were validly tendered, and $282 million in aggregate principal amount of the 8.75% notes due 2020 were issued in the exchange.

In August 2010, we issued $1.0 billion aggregate principal amount of 8.25% senior notes due 2020. We used the net proceeds from the offerings of those notes, together with available cash, to redeem $973 million aggregate principal amount of outstanding notes on September 29, 2010, including $713 million of notes due in 2011 and $260 million of notes due in 2015. As a result of these transactions, we have paid off all of our material debt maturities due in 2011.

On June 25, 2010, the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 (the "Pension Relief Act") was signed into law. The Pension Relief Act provides funding relief for defined benefit pension plan sponsors by deferring near-term contributions. As allowed by the Pension Relief Act, we elected funding relief for the 2009 plan year and expect to elect funding relief for the 2011 plan year, which is expected to reduce our total U.S. pension contributions in 2011 to 2014 by approximately $275 million to $325 million. We currently estimate that we will be required to make contributions to our funded U.S. pension plans

of approximately $200 million to $225 million in 2011. The reduction from funding relief will result in increased contributions in years after 2014.

SRI has certain minority exit rights that, if triggered and exercised, could require us to make a substantial payment to acquire SRI's interests in GDTE and GDTNA following the determination of the fair value of SRI's interests. For further information regarding our global alliance with SRI, including the events that could trigger SRI's exit rights, see "Item 1. Business. Description of Goodyear's Business — Global Alliance." As of the date of this filing, SRI has not provided us notice of any exit rights that have become exercisable.

Our ability to service debt and operational requirements is also dependent, in part, on the ability of our subsidiaries to make distributions of cash to various other entities in our consolidated group, whether in the form of dividends, loans or otherwise. In certain countries where we operate, such as Venezuela, transfers of funds into or out of such countries by way of dividends, loans, advances or payments to third-party or affiliated suppliers are generally or periodically subject to certain requirements, such as obtaining approval from the foreign government and/or currency exchange board before net assets can be transferred out of the country. In addition, certain of our credit agreements and other debt instruments limit the ability of foreign subsidiaries to make distributions of cash. Thus, we would have to repay and/or amend these credit agreements and other debt instruments in order to use this cash to service our consolidated debt. Because of the inherent uncertainty of satisfactorily meeting these requirements or limitations, we do not consider the net assets of our subsidiaries, including our Venezuelan subsidiary, that are subject to such requirements or limitations to be integral to our liquidity or our ability to service our debt and operational requirements. At December 31, 2010, approximately $627 million of net assets were subject to such restrictions.

Effective January 1, 2010, Venezuela's economy was considered to be highly inflationary under U.S. generally accepted accounting principles since it experienced a rate of general inflation in excess of 100% over the latest three year period, based upon the blended Consumer Price Index and National Consumer Price Index. Accordingly, the U.S. dollar was determined to be the functional currency of our Venezuelan subsidiary. All gains and losses resulting from the remeasurement of its financial statements since January 1, 2010 were determined using official exchange rates and are reported in Other Expense.

On January 8, 2010, Venezuela established a two-tier exchange rate structure for essential and non-essential goods. For essential goods the official exchange rate was 2.6 bolivares fuertes to the U.S. dollar and for non-essential goods the official exchange rate was 4.3 bolivares fuertes to the U.S. dollar. As announced by the Venezuelan government in December 2010, on January 1, 2011, the two-tier exchange rate structure was eliminated and the official exchange rate for essential goods cannot be used for our unsettled amounts at December 31, 2010. Effective January 1, 2011, the official exchange rate of 4.3 bolivares fuertes to the U.S. dollar was established for substantially all goods.

The $110 million foreign currency exchange loss in the first quarter of 2010 primarily consisted of a $157 million remeasurement loss on bolivar-denominated net monetary assets and liabilities, including deferred taxes, at the time of the January 2010 devaluation. The loss was primarily related to cash deposits in Venezuela that were remeasured at the official exchange rate of 4.3 bolivares fuertes applicable to non-essential goods, and was partially offset by a $47 million subsidy receivable related to U.S. dollar-denominated payables that were expected to be settled at the official subsidy exchange rate of 2.6 bolivares fuertes applicable to essential goods. Since we expected these payables to be settled at the subsidy essential goods rate, we established a subsidy receivable to reflect the expected benefit to be received in the form of the difference between the essential and non-essential goods exchange rates. Throughout 2010, we periodically assessed our ability to realize the benefit of the subsidy receivable, and a substantial portion of purchases by our Venezuelan subsidiary had qualified and settled at the official exchange rate for essential goods.

As a result of the elimination of the official subsidy exchange rate for essential goods, we no longer expect our Venezuelan subsidiary to settle payables at that exchange rate. Accordingly, we recorded a foreign exchange loss of $24 million in the fourth quarter of 2010 related to the reversal of the subsidy receivable at December 31, 2010.

If in the future we convert bolivares fuertes at a rate other than the official exchange rate or the official exchange rate is revised, we may realize additional losses that would be recorded in the statement of operations. At

December 31, 2010, we had bolivar fuerte denominated monetary assets of $210 million which consisted primarily of $188 million of cash, $18 million of deferred tax assets and $4 million of accounts receivable, and bolivar fuerte denominated monetary liabilities of $44 million which consisted primarily of $17 million of intercompany payables, $12 million of accounts payable — trade and $7 million of compensation and benefits. At December 31, 2009, we had bolivar fuerte denominated monetary assets of $389 million which consisted primarily of $370 million of cash, $11 million of deferred tax assets and $5 million of accounts receivable, and bolivar fuerte denominated monetary liabilities of $78 million which consisted primarily of $29 million of income taxes payable, $19 million of accounts payable — trade, and $11 million of compensation and benefits. All monetary assets and liabilities were remeasured at 4.3 bolivares fuertes to the U.S. dollar at December 31, 2010, and were translated at 2.15 bolivares fuertes to the U.S. dollar at December 31, 2009.

Goodyear Venezuela's sales were 1.2% and 2.4% of our net sales for the twelve months ended December 31, 2010 and 2009, respectively. Goodyear Venezuela's operating income was 6.4% and 38.4% of our segment operating income for the twelve months ended December 31, 2010 and 2009, respectively. The percentage for the twelve months ended December 31, 2009 was high due to the operating loss in 2009 in North American Tire. Goodyear Venezuela's sales are bolivar fuerte denominated and cost of goods sold are approximately 50% bolivar fuerte denominated and approximately 50% U.S. dollar denominated. A further 10% decrease in the bolivar fuerte against the U.S. dollar would decrease Goodyear Venezuela's sales and increase cost of goods sold by approximately $40 million and approximately $30 million, respectively, on an annual basis.

During 2010, Goodyear Venezuela settled $116 million and $20 million, respectively, of U.S. dollar-denominated intercompany payables and accounts payable — trade. For the twelve month period ended December 31, 2010, approximately 98% of those payables were settled at the essential goods rate of 2.6 bolivares fuertes to the U.S. dollar. At December 31, 2010, settlements of U.S. dollar-denominated liabilities pending before the currency exchange board were $107 million. At December 31, 2010, $19 million of the requested settlements were pending up to 180 days, $20 million were pending from 180 to 360 days and $68 million were pending over one year. Amounts pending from 180 to 360 days include dividends payable of $17 million and amounts pending over one year include imported tires of $27 million, intercompany charges for royalties of $15 million and dividends payable of $14 million. Currency exchange controls in Venezuela continue to limit our ability to remit funds from Venezuela.

Goodyear Venezuela contributed a significant portion of Latin American Tire's sales and operating income in 2010 and 2009. The devaluation of the Venezuelan bolivar fuerte against the U.S. dollar in January 2010 and weak economic conditions and operational disruptions in Venezuela adversely impacted Latin American Tire's operating income by approximately $85 million as compared to 2009. Additionally, we recorded $134 million in charges related to the devaluation of the bolivar fuerte in 2010 in Other Expense. The operational challenges we face include high absenteeism, a lack of supplies and difficulties importing raw materials and finished goods. In response to the devaluation and conditions in Venezuela, we continue to evaluate the need to adjust prices for our products while remaining competitive and have taken steps to address our operational challenges, including securing necessary approvals for import licenses and increasing the local production of certain tires. Our pricing policies take into account factors such as fluctuations in raw material cost, production cost, market demand and adherence to government price controls. As a result, the elimination of the two-tier exchange rate structure is not expected to have a significant impact on Latin American Tire's sales and operating income in 2011 compared to 2010. For a discussion of the risks related to our international operations, including Venezuela, see "Item 1A. Risk Factors".

We believe that our liquidity position is adequate to fund our operating and investing needs and debt maturities in 2011 and to provide us with flexibility to respond to further changes in the business environment. If market opportunities exist, we may choose to undertake additional financing actions in order to further enhance our liquidity position which could include obtaining new bank debt or capital markets transactions. However, the challenges of the present business environment may cause a material reduction in our liquidity as a result of an adverse change in our cash flow from operations or our access to credit or other capital. See "Item 1A. Risk Factors" for a more detailed discussion of these challenges.